

Electrical installation solutions for buildings

NEMA Standard Products

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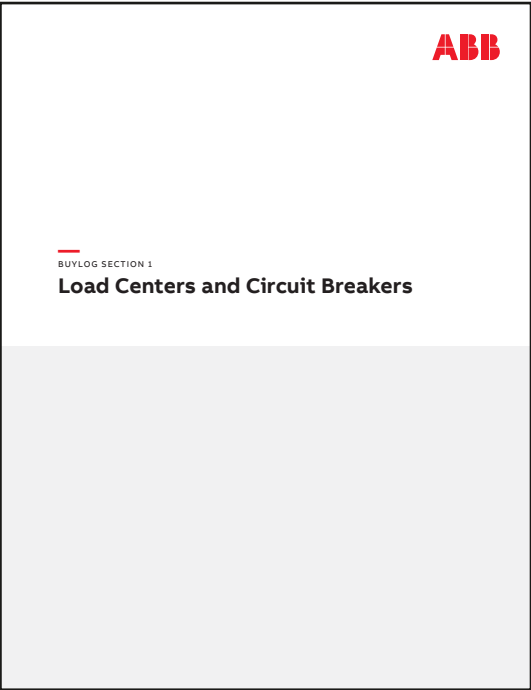
Encapsulated type QMS

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NEMA Flow Goods products

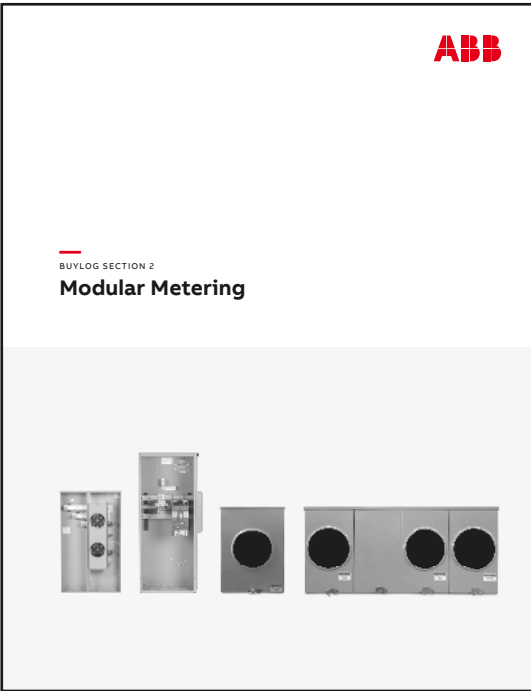
Thank you for your interest in NEMA Flow Goods products! Our offering consists of load centers, circuits breakers, surge protection devices and modular metering, which are sold primarily in the United States. In order to provide you with the most accurate and up to date information, we have provided the links below to our US catalog



US Catalog
Load Centers, Circuit Breakers
and Surge Protection



Visit our website



US Catalog
Modular Metering



Visit our website

Residential Surge Protection

Externally Mounted Surge Devices and Internally Mounted Surge Devices

Introduction

ABB offers a series of residential surge protection devices that can be installed inside or outside of the home's electrical panel and offer superior protection for sensitive electronics.

All residential surge protection devices are UL listed, designed for 120/240V applications and meet the NEC 2023.



THOMESURGE

The THOMESURGE is a Type 1 SPD designed for service entrance or subpanel locations and provides surge protection for the entire home or office. The THOMESURGE is a cost effective surge solution that can be installed with any manufacturer's panel.



Visit our website

<https://new.abb.com/low-voltage/products/surge-protective-devices/thomesurge>



THQLSURGE2

The THQLSURGE2 is a Type 1 SPD designed for service entrance or subpanel locations and provides surge protection for the entire home or office. The THQLSURGE2 conveniently connects inside the GE/ABB PowerMark Gold & Pro load center, providing surge protection for the entire panel and all attached loads.



Visit our website

<https://electrification.us.abb.com/products/surge-protective-devices/thqlsurge2-surge-protective-device>

THOMESURGE(P)

Residential Surge Protection Device

- Features:
- 36 kA per Phase
 - UL 1449 Listed
 - 10 kA I-nominal Rating
 - 200 kA SCCR
 - Meets NEC 2023 Requirements



Product Specifications

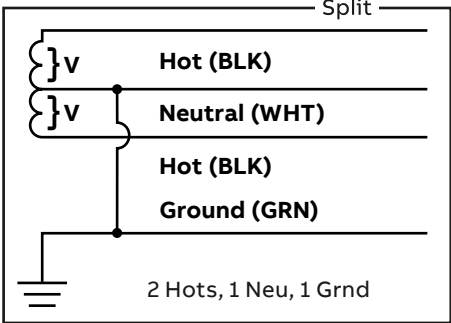
General Specifications	
Maximum Surge Current	36 kA per Phase
UL Type Designation	Type 1
UL 1449 I-nominal Rating	10 kA
UL 1449 Short Circuit Current Rating	65 kA
Design Specifications	
Custom MOV design for High Energy Handling in Category C locations	
Thermally Protected MOVs	
External Parallel Connected for Mounting next to Electrical Gear	
Reduced Mode of Protection (L1-N, L2-N)	
Diagnostic & Status Monitoring Specifications	
LED Protection Status Monitoring (Single LED Standard)	

Enclosure	
Polycarbonate 4.25" × 2.41" × 2.75"	
Lid ultrasonically sealed	
NEMA 4X	
1/2 inch NPT Side Mount Nipple	
Filtering	
NO	
Technical data	
Humidity Range	0 – 95% non-condensing
Operating Frequency	50 – 60 Hz
Operating Temperature	–35°C to +85°C
Typical Connection	18" #12 AWG (pre-wired pig tails)
UL 1449 Performance Data	
System Voltage	L-N L-G N-G L-L SCCR MCOV
240/120V Split Ø	700 – – 1200 200 kA 180

Standards Compliance & Certifications

UL 1449 5th Edition: 2023, cULus, (UL File: VZCA.E316468), ANSI/IEEE C62.41.1-2002, C62.41.2-2002, C62.45-2002, NEC Article 285
ISO 9001: 2014 Quality Management System, ISO 17025:2007 Laboratory Certification (UL DAP Program) Compliance with RoHS, REACH & California Prop 65.
100% Quality Tested prior to shipping

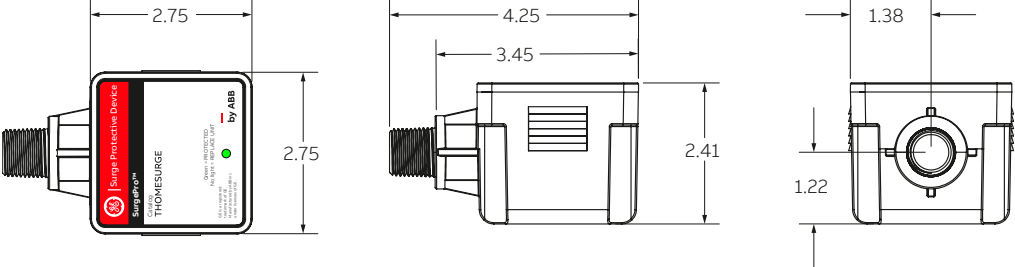
Wiring Configuration



Size and Mechanical Specifications

Dimensions	4.25" × 2.41" × 2.75"
Weight	0.46 lbs
Enclosure Type	Polycarbonate NEMA 4X
Installation Type	Indoor / Outdoor
Mounting Method	Flush / Flange / Through-hole

Product Diagram



SurgePro™

Surge Protective Device (SPD)

This surge protective device is designed to be used on electrical systems that are 120/240 or 120/208 V AC.



WARNING

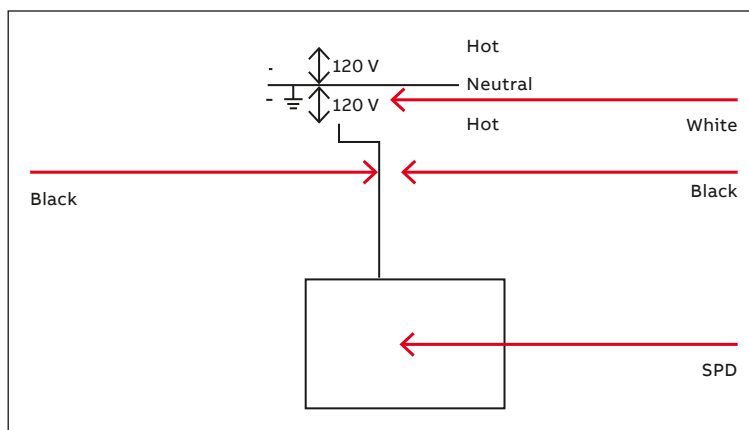
- Risk of shock, disconnect power before installation.
- SPD should be installed by a qualified electrician in accordance with national and local electrical codes.
- Hazardous voltages exist within SPDs when energized — SPDs should never be installed or serviced when energized. During installation into an electrical system, the SPD must not be energized until the electrical system is completely installed, inspected and tested.
- Use appropriate safety precautions including personal protection equipment.
- Do not HIPOT the SPD unit or the electrical system in which the SPD unit is connected without disconnecting the SPD unit's conductors, including phase, neutral and ground.
- Cannot be used on ungrounded systems.
- The voltage rating of the SPD and system must be verified before energizing the SPD.
- Failure to follow these instructions can result in death, serious injury and/or equipment damage.
- This manual shall be read in its entirety prior to installing.

Pre-plan your installation

- Meet all national and local codes. (NEC Article 242 addresses SPDs.)
- Mount SPD as close to panel or equipment as possible to keep leads short. Ensure leads are as short and straight as possible, including neutral and ground.
- Consider a breaker position that is closest to the SPD and the panel's neutral and ground.
- Suggested breaker size is 20 A 2-pole breaker.
- Short circuit current rating (SCCR) 200 kA.
- Make sure system is grounded per NEC and clear of faults before energizing SPD.

Installation instructions

1. Use a voltmeter to check all voltages to ensure compatibility with SPD.
2. Remove power from panel. Confirm panel is de-energized by using a voltmeter.
3. Identify connection/breaker location and SPD location.
4. Remove an appropriately sized knockout from panel.
5. Mount SPD. Connect to equipment using an approved wiring method, including seals appropriate for the enclosure rating.
6. Connect conductors as appropriate — short and straight as possible.
7. Label or mark conductors as appropriate — energized — black: neutral — white.
8. Make sure system is bonded per NEC and is clear of hazards or faults before energizing (N-G bonding not per NEC is the #1 cause of SPD failures).
9. Apply power to the panel.
10. Verify that the status indication light on the face of the SPD is illuminated. If the light is not on, remove the power supplying the panel and review all the previous installation procedures.



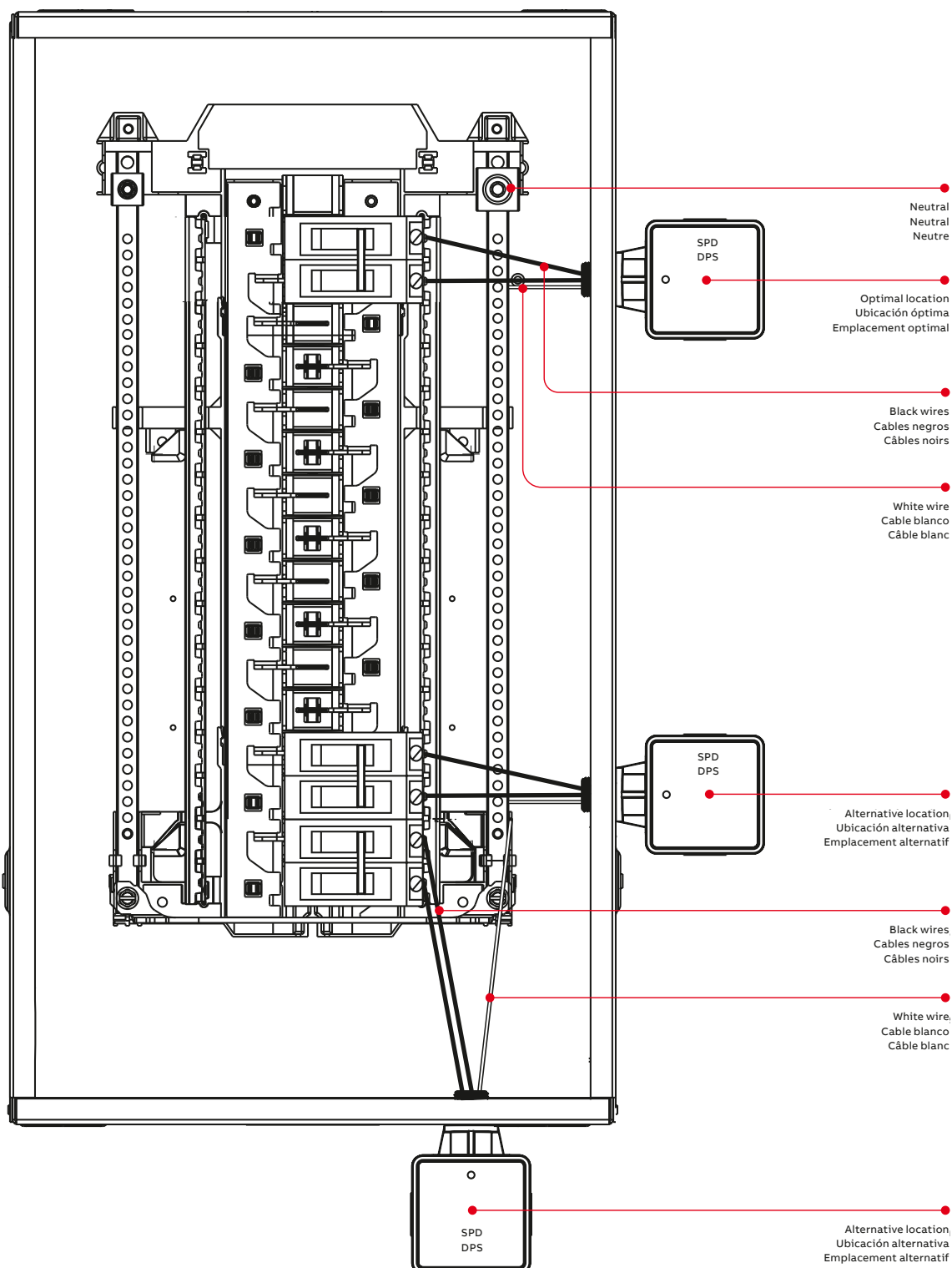
SurgePro™

Surge Protective Device (SPD)

The above picture is an example of a typical load center, the location of the neutral bar may vary.

The unit contains no serviceable parts.

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation operation or maintenance. Should further information be desired, or should problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to ABB Inc.



SurgePro™

AC power surge protective device



Benefits

- AC power surge protective device for the entire home or office – computers, TV, appliances and all other sensitive electronic equipment
- Mitigates against surge damage caused by lightning and utility switching events
- Installs in your ABB PowerMark™ load center (the best location for protecting all AC circuits in your home) directly onto the bus
- Up to 50,000 amps of surge protective strength
- Meets newest UL 1449 5th edition surge protection requirements
- 3-year, \$25,000 connected equipment warranty (from date of purchase) when installed according to NEC electrical and safety codes on cULus approved equipment
- Can be installed to meet NEC 2023 Art. 230.67 SPD requirements for dwelling units at or adjacent to service entrances.

Product features

- Single phase, three wire, 120/240 VAC, 25 kA per phase rated
- UL 1449 5th edition listed (VZCA:E316636 and VZCA7:E316636) as a Type 1 SPD with a 100 kA SCCR rating
- Monolithic, high energy metal oxide varistors per mode with integral thermal and overcurrent protection
- Illuminated LED indicates proper function of protective elements

Technical data

The THQLSURGE2 is designed for service entrance or subpanel locations. It provides small, easy to install surge protection for the entire home or office. The surge protective device consists of monolithic, high energy metal oxide varistors per mode with integral thermal and overcurrent protection. An illuminated LED indicates the proper function of the protective elements. The THQLSURGE2 conveniently connects inside the GE PowerMark load center, directly onto the bus, like a circuit breaker, providing surge protective elements for the entire panel and all attached loads.

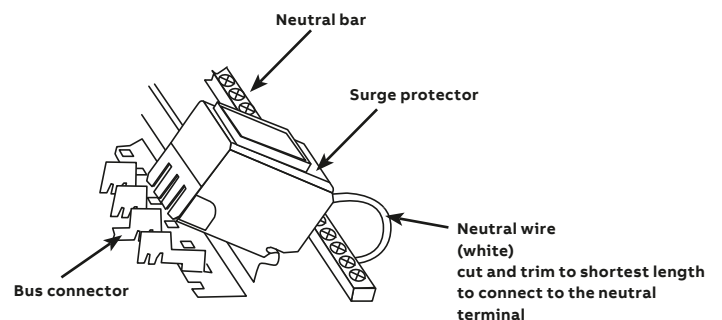
Catalog number	Per mode surge current rating ²	System voltage 50/60 Hz	Transient energy rating, 10/1000 μ S, total	Nominal discharge current I_n	Configuration	UL 1449 4th edition Voltage Protection Rating (VPR)			
						L-N	N-G	L-G	L-L
THQLSURGE2	25 kA	120/240 V	1520 J	10 kA	1 ph 3 wire	600 V	–	–	1000 V

¹ Total surge rating is defined as the maximum surge current in the entire device for a single pulse 8/20 μ S

² Per mode defined as varistor surge current, single pulse 8/20 μ S

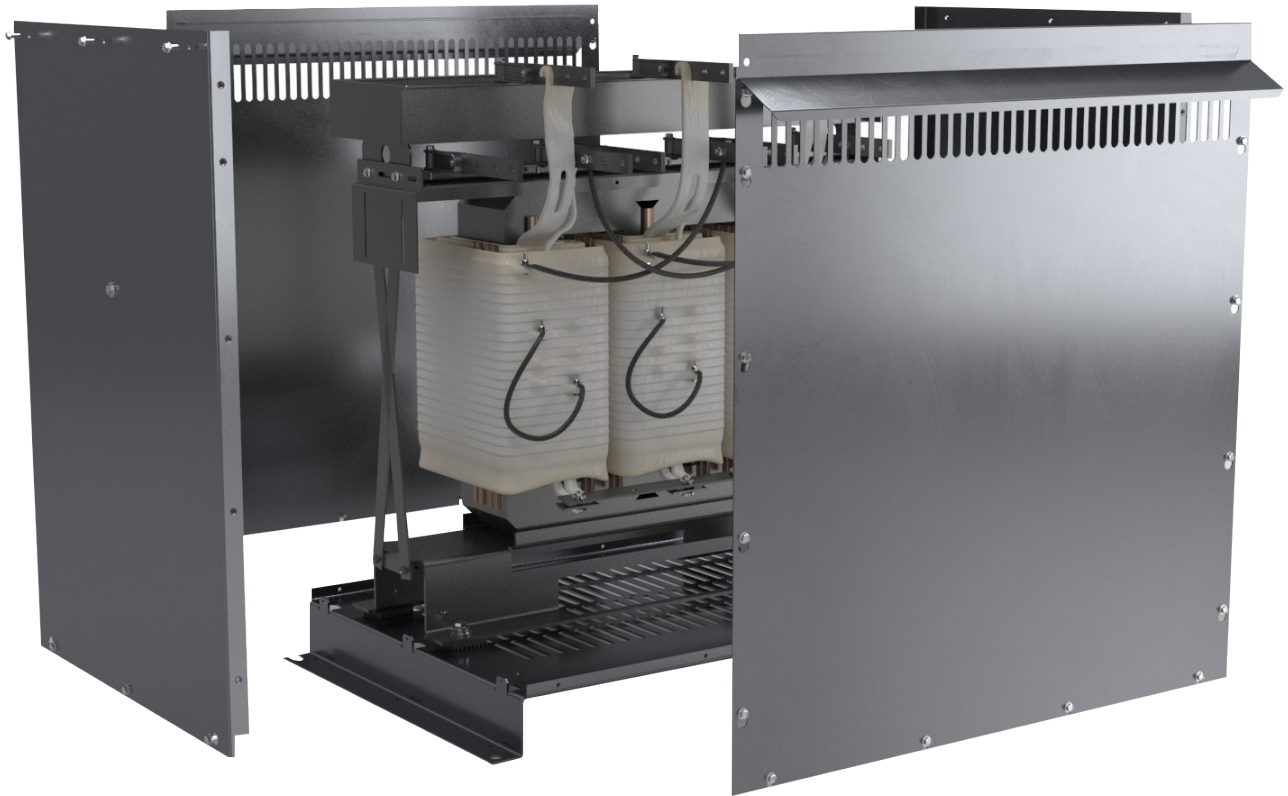
THQLSURGE2

- Up to 225 amp load centers
- SCCR to 100 kA
- For use in GE load centers
- Can be used to meet NEC® 2023 Art. 230.67



Low voltage general purpose dry type transformers

Single phase and three phase; 600 volts and below



Overview



		Low Voltage Dry Type Vented Transformers				
		General Purpose Phase 1	General Purpose Phase 3	Guard I™	Guard II™	Guard III™
Application		General purpose lighting and electrical installations, Motors, Resistance heating, Motor generators (without solid state drives), Airports	General purpose lighting and electrical installations, Motors, Resistance heating, Motor generators (without solid state drives), Airports	Data centers, Critical care, Office buildings, Lighting circuits	Data centers, Critical care, Hospitals	Data centers, Critical care, Hospitals, Schools, Museums, Casinos, Gaming facilities
Electrostatic shields		–	–	■	■	■
Noise isolation		–	–	■	■	–
Harmonic mitigating		–	–	–	–	■
Surge suppression		–	–	–	■	–
Integrated load center and circuit breakers		–	–	–	–	–
Phase	1	■	–	–	–	–
	3	–	■	■	■	■
kVA, max		100	300	750	112.5	300
Primary voltage		240 x 480	480	480	480	480
Secondary voltage, 3-wire		120/240 V	208Y/120 V	208Y/120 V	208Y/120 V	208Y/120 V
Frequency		60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Windings	Aluminum (AL)	■	■	■	■	–
	Copper (CU)	■	■	■	■	■
Temperature rise		150 °C	80 °C, 115 °C, 150 °C	80 °C, 115 °C, 150 °C	80 °C, 115 °C, 150 °C	150 °C
Audible sound level (dB) NEMA ST-20 std		Meets or exceeds NEMA ST-20	Meets or exceeds NEMA ST-20	Meets or exceeds NEMA ST-20	Meets or exceeds NEMA ST-20	Meets or exceeds NEMA ST-20
Seismic qualification		CBC 2022 and IBC 2021	CBC 2022 and IBC 2021	CBC 2022 and IBC 2021	CBC 2022 and IBC 2021	CBC 2022 and IBC 2021
Enclosure	NEMA 2	■	■	■	■	■
	Optional rain shield kit: NEMA 3R	■	■	■	■	■
Accessible mounting feet		■	■	■	■	–

■ Applicable
– N/A

Overview

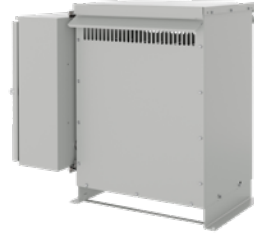


		Low Voltage Dry Type Vented Transformers			
		K-Factor	Low audible noise	Midtapped	Drive Isolation
Application		Non-linear loads, Motors	Office buildings, Hospitals, Schools, Museums, Libraries	Office buildings	Silicon controlled rectified (SCR) control circuitry in adjustable speed drives, Elevators, Escalators, People movers
Electrostatic shields		■	-	-	-
Noise isolation		-	-	-	-
Harmonic mitigating		-	-	-	-
Surge suppression		-	-	-	-
Integrated load center and circuit breakers		-	-	-	-
Phase	1	-	-	-	-
	3	■	■	■	■
kVA, max		300	500	500	220
Primary voltage		480	480	480	575
Secondary voltage, 3-wire		208Y/120 V	208Y/120 V	240/120 V	460Y/266 V ²
Frequency		60 Hz	60 Hz	60 Hz	60 Hz
Windings	Aluminum (AL)	■	■	■	■
	Copper (CU)	■	■	■	-
Temperature rise		80 °C, 115 °C, 150 °C	80 °C, 115 °C, 150 °C	80 °C, 115 °C, 150 °C	150 °C
Audible sound level (dB) NEMA ST-20 std		Meets or exceeds NEMA ST-20	Exceeds NEMA ST-20	Meets or exceeds NEMA ST-20	Meets or exceeds NEMA ST-20
Seismic qualification		CBC 2022 and IBC 2021	CBC 2022 and IBC 2021	CBC 2022 and IBC 2021	CBC 2022 and IBC 2021
Enclosure	NEMA 2	■	■	■	■
	Optional rain shield kit: NEMA 3R	■	■	■	■
Accessible mounting feet		■	■	■	■

²See product pages for additional list of voltage variations

■ Applicable
- N/A

Overview



		Low Voltage Dry Type Non-Ventilated Transformers	Servicenter™ Integrated Transformer and Distribution Panel	
		Totally Enclosed, Non-Ventilated (TENV)	Three Phase Servicenter™ Integrated Transformer and Distribution Panel	Single Phase Servicenter™ Integrated Transformer and Distribution Panel
Application		Textile, Automotive	Industrial, remote installation sites, Office buildings, Parking lots, Assembly lines	Industrial, remote installation sites, Office buildings, Parking lots, Assembly lines
Electrostatic shields		–	–	–
Noise isolation		–	–	–
Harmonic mitigating		–	–	–
Surge suppression		–	–	–
Integrated load center and circuit breakers		–	■	■
Phase	1	–	–	■
	3	■	■	–
kVA, max		75	30	25
Primary voltage		480	480	480
Secondary voltage, 3-wire		208Y/120 V	208Y/120 V	208Y/120 V
Frequency		60 Hz	60 Hz	60 Hz
Windings	Aluminum (AL)	■	■	■
	Copper (CU)	■	■	–
Temperature rise		80 °C, 115 °C, 150 °C	150 °C	115 °C
Audible sound level (dB) NEMA ST-20 std		Meets or exceeds NEMA ST-20	Meets or exceeds NEMA ST-20	Meets or exceeds NEMA ST-20
Seismic qualification		CBC 2022 and IBC 2021	CBC 2022 and IBC 2021	CBC 2022 and IBC 2021
Enclosure	NEMA 2	–	■	■
	Optional rain shield kit	–	■	–
	NEMA 3R	■	■	■
Accessible mounting feet		■	■	–

■ Applicable
– N/A



General purpose

Product overview - one phase



Type QL Transformer

ABB's general purpose single-phase dry type transformers are step-down transformers designed for installations that require a 3-wire secondary voltage for 120/240 V systems. These units can also be used in 2-wire, 120x240 V applications. Their primary voltages are 240x480.

Optional wall mount brackets are available for most models. Lug kit and copper ground bar are included.

Features

- Connection: 3-wire or 2-wire secondaries
- Voltages: (P) 240x480 (S) 120/240
- Temperature rise: 150 °C; 220 (R) insulation class; IEC 60085 Class R
- Frequency: 60 Hz
- Ambient temperature: 40 °C
- Standard single-phase tap arrangement
- Painted, ANSI #61 gray NEMA 2 enclosure
- Type QL
- Audible sound level: NEMA ST-20 Standard
- Seismic qualifications – CBC 2022 and IBC 2021; ASCE 7.05-2016
- UL 1561
- UL & cUL listed (XQNX, XQNX7:E323777)
- Energy efficiency: DOE 2016 (10 CFR Part 431)
- Energy efficiency: NRCAN (CSA 802.2)
- UL energy verification – for US and Canada (ZXPC:EV519886) (ZZED:EV23760)

General purpose

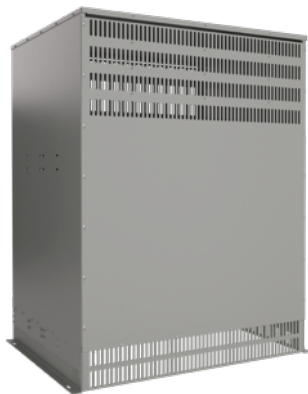


Aluminum windings 150 °C rise NEMA 2						
Primary voltage	Secondary voltage	kVA	Taps (FCBN,FCAN; %)	Product net weight (lbs.)	Frame size	Ordering code
240 x 480 Volts	120 / 240 Volts	15	(-4,+2: 2.5%)	320	YX171	9T33A2670
		25	(-4,+2: 2.5%)	320	YX171	9T33A2671
		37.5	(-4,+2: 2.5%)	460	YX172	9T33A2672
		50	(-4,+2: 2.5%)	490	XV173	9T33A2673
		75	(-4,+2: 2.5%)	600	YX174	9T33A2674
		100	(-4,+2: 2.5%)	950	YX175	9T33A2675

Copper windings 150 °C rise NEMA 2						
Primary voltage	Secondary voltage	kVA	Taps (FCBN,FCAN; %)	Product net weight (lbs.)	Frame size	Ordering code
240 x 480 Volts	120 / 240 Volts	15	(-4,+2: 2.5%)	350	YX171	9T33C2670
		25	(-4,+2: 2.5%)	350	YX171	9T33C2671
		37.5	(-4,+2: 2.5%)	510	YX172	9T33C2672
		50	(-4,+2: 2.5%)	500	XV173	9T33C2673
		75	(-4,+2: 2.5%)	750	YX174	9T33C2674

General purpose

Product overview - three-phase



Type QL Transformer

ABB low voltage dry type transformers are designed to give you what you want, when you want it. These transformers have outward facing feet for faster installation, easy off front and back panel for rapid service access, and ground and lug kits included on most units up to 150 kVA; more value for your money.

Features

- Unique core and coil design using grain-oriented silicon steel
- Core and coil assemblies mounted on rubber isolation pads
- Single piece front/back
- Outward-facing feet
- Lifting eyes provided in top clamp
- Lug kit included up through 150kVA
- Copper ground bar kit included up through 150kVA
- Copper ground strap

Ordering code construction

9T10A1001G31						
ABB standard						
1 = QL DOE 2016 design						
Transformer type						
0 = Standard, K1						
1 = K13						
2 = K20						
4 = K4						
7 = Guard II/servicenter						
8 = Spare parts						
Options						
A = Aluminum coil						
B ¹ = Aluminum C&C (no enclosure)						
C = Copper coil						
S = AL stainless steel enclosure						
V ¹ = Copper C&C (no enclosure)						
Z = CU stainless steel enclosure						
Y = Accessories						
Note: 750 kVA available						
kVA rating						
1 = 15 kVA						
2 = 30 kVA						
3 = 45 kVA						
4 = 75 kVA						
5 = 112.5 kVA						
6 = 150 kVA						
7 = 225 kVA						
8 = 300 kVA						
9 = 500 kVA						
Voltage series						
See voltage chart on the next page						

Catalog no. suffix codes				
Core & coil temp rise				
150 °C				
115 °C				
80 °C				
Core & coil characteristics	Temp rise rating only	G01 or blank	G31	G61
	-3 dB noise reduction	G02	G32	G62
	Electrostatic shield*	G03	G33	G63
	-3 dB noise reduction + electrostatic shield	G04	G34	G64
	-5 dB noise reduction	G05	G35	G65
	-5 dB noise reduction + electrostatic shield	G06	G36	G66

* An Electrostatic Shield (a Guard I transformer) is bonded to the ground terminal and is a copper barrier between the primary and secondary windings to reduce electrical noise. All K-factor transformers come standard with an Electrostatic Shield (K4, K13, K20).

¹These options are UL recognized components.

Please Note: This Ordering code nomenclature is for illustrative purposes only. Not all Ordering code combinations are available for production. Please reference the ordering tables beginning on page 5-12 for Three-phase DOE 2016 Efficiency transformers currently available for ordering. For additional assistance, please contact Customer Service at 1-800-431-7867.

General purpose

Three-phase

Three-phase common voltages

Series	Primary Voltage	Secondary Voltage
100	480	208Y/120
101	480	220
102	480	220Y/127
103	480	208
104	480	230Y/133
105	480	240Y/139
106	480	380
107	480	380Y/219
108	480	400Y/231
109	480	415Y/240
110	480	480
111	480	575
112	480	600
113	480	440Y/254
114	480	600Y/346
115	480	440
116	480	230/115
117	480	480Y/277
118	480	240/120
119	480	240
121	480	220/110
123	480	400
124	480	460
125	480	420
126	480	230
127	480	575Y/332
129	480	460Y/266
131	208	240
132	208	240/120
133	208	480
134	208	480Y/277
135	208	380Y/219
136	208	230
137	208	575
138	208	460
139	208	400Y/231
140	208	208
141	208	230Y/133
142	208	380
143	208	220/110
144	208	220Y/127
145	208	208Y/120
146	208	400
147	208	315
148	208	600
149	208	460Y/266
150	208	220
151	208	230/115
152	208	415Y/240
153	240	480Y/277
154	240	480
155	240	400Y/231

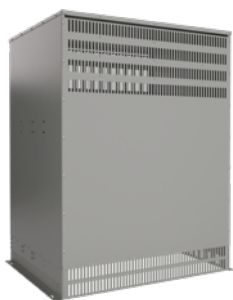
Three-phase common voltages

Series	Primary Voltage	Secondary Voltage
157	240	575
158	240	460Y/266
159	240	240Y/139
160	240	600
161	240	208Y/120
162	240	380
163	240	440
164	240	240/120
165	240	380Y/219
166	220	380Y/219
167	220	400Y/231
168	220	240Y/139
169	220	220
170	220	208Y/120
171	220	480Y/277
172	220	440Y/254
173	220	480/240
174	220	480
175	220	415Y/240
176	380	220Y/127
177	380	480
178	380	220
179	380	208Y/120
180	380	415Y/240
181	380	240/120
184	380	480Y/277
185	380	380Y/219
186	380	230Y/133
187	380	240
188	440	220Y/127
189	440	480
190	440	208Y/120
191	440	380
192	440	380Y/219
193	440	400Y/231
194	440	575Y/332
195	440	240/120
196	440	480Y/277
197	440	240
198	230	460
199	230	400Y/231
200	230	400
201	230	480Y/277
202	230	208Y/120
203	230	480
204	400	230Y/133
205	400	380Y/219
206	400	480
207	400	220Y/127
209	400	400Y/231
210	400	208Y/120
211	400	208Y/120

Three-phase common voltages

Series	Primary Voltage	Secondary Voltage
212	400	480Y/277
213	415	208Y/120
214	415	460
215	415	220Y/127
216	416	208Y/120
217	416	480Y/277
218	460	208Y/120
219	460	220
221	460	400Y/231
222	460	220Y/127
223	460	230
224	460	575Y/332
225	460	230Y/133
226	460	460Y/266
227	550	208Y/120
228	550	480Y/277
229	575	208Y/120
230	575	480Y/277
231	575	240Y/139
232	575	460
233	575	480
234	575	230Y/133
235	575	230
236	600	240/120
237	600	480
238	600	480Y/277
239	600	240
240	600	208Y/120
241	600	230Y/133
242	600	240Y/139
243	600	208
244	600	600Y/346
245	690	400Y/231
246	690	208Y/120
247	277	415Y/240
248	315	208Y/120
249	320	480Y/277
250	420	480Y/277
251	490	480Y/277
252	500	480Y/277

General purpose



K = 1 150°C Rise NEMA 2 aluminum coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1001
		30	(+2, -4: 2.5%)	330	UY72A	9T10A1002
		45	(+2, -4: 2.5%)	444	UY03A	9T10A1003
		75	(+2, -4: 2.5%)	561	UY14A	9T10A1004
		112.5	(+2, -4: 2.5%)	680	DY05A	9T10A1005
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1006
		225	(+2, -4: 2.5%)	1450	DY17A	9T10A1007
		300	(+2, -4: 2.5%)	1670	DY08A	9T10A1008
		500	(+2, -2: 2.5%)	2900	DY79A	9T10A1009
		750	(+2, -2: 2.5%)	4292	DY67A	9T10A1302

K = 1 115°C Rise NEMA 2 aluminum coil three-phase

Input Voltage	Output Voltage	kVA	Taps	Approx. Net Weight (Lbs)	Frame Size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1001G31
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1002G31
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1003G31
		75	(+2, -4: 2.5%)	603	UX74A	9T10A1004G31
		112.5	(+2, -4: 2.5%)	830	DX75A	9T10A1005G31
		150	(+2, -4: 2.5%)	1250	DX76A	9T10A1006G31
		225	(+2, -4: 2.5%)	1670	DX77A	9T10A1007G31
		300	(+2, -4: 2.5%)	1985	DX78A	9T10A1008G31
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1009G31

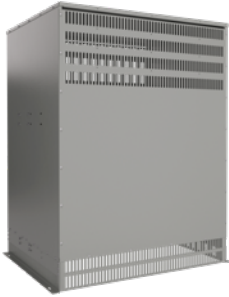
K = 1 80°C Rise NEMA 2 aluminum coil three-phase

Input Voltage	Output Voltage	kVA	Taps	Approx. Net Weight (Lbs)	Frame Size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	330	UY72A	9T10A1001G61
		30	(+2, -4: 2.5%)	444	UY03A	9T10A1002G61
		45	(+2, -4: 2.5%)	561	UY74A	9T10A1003G61
		75	(+2, -4: 2.5%)	680	DY05A	9T10A1004G61
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T10A1005G61
		150	(+2, -4: 2.5%)	1450	DY17A	9T10A1006G61
		225	(+2, -4: 2.5%)	1985	DX78A	9T10A1007G61
		300	(+2, -2: 2.5%)	2900	DY79A	9T10A1008G61
		500	(+2, -2: 2.5%)	-	DX67A	9T10A1009G61

K = 1 150°C Rise NEMA 2 aluminum coil three-phase

Input Voltage	Output Voltage	kVA	Taps	Approx. Net Weight (Lbs)	Frame Size	Ordering code
208 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1451
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1452
		45	(+2, -4: 2.5%)	561	UY74A	9T10A1453
		75	(+2, -4: 2.5%)	680	DY75A	9T10A1454
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T10A1455
		150	(+2, -4: 2.5%)	1250	DX76A	9T10A1456
		225	(+2, -4: 2.5%)	1670	DY78A	9T10A1457
		300	(+2, -2: 2.5%)	2900	DX79A	9T10A1458

General purpose



K = 1 150°C Rise NEMA 2 aluminum coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
208 Volts Delta	480Y/277 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1341
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1342
		45	(+2, -4: 2.5%)	561	UY74A	9T10A1343
		75	(+2, -4: 2.5%)	680	UY74A	9T10A1344
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T10A1345
		150	(+2, -4: 2.5%)	1250	DX76A	9T10A1346
		225	(+2, -4: 2.5%)	1670	DY78A	9T10A1347
		300	(+2, -2: 2.5%)	2900	DX79A	9T10A1348

K = 1 150°C Rise NEMA 2 aluminum coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
240 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1611
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1612
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1613
		75	(+2, -4: 2.5%)	561	UY74A	9T10A1614
		112.5	(+2, -4: 2.5%)	680	DY75A	9T10A1615
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1616
		225	(+2, -4: 2.5%)	1450	DY77A	9T10A1617
		300	(+2, -4: 2.5%)	1670	DY78A	9T10A1618
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1619

K = 1 150°C Rise NEMA 2 aluminum coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
240 Volts Delta	480Y/277 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1531
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1532
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1533
		75	(+2, -4: 2.5%)	561	UY74A	9T10A1534
		112.5	(+2, -4: 2.5%)	680	DY75A	9T10A1535
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1536
		225	(+2, -4: 2.5%)	1450	DY77A	9T10A1537
		300	(+2, -4: 2.5%)	1670	DY78A	9T10A1538
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1539

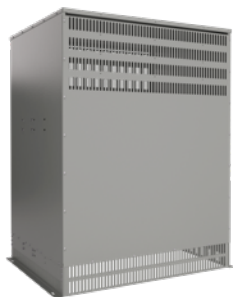
K = 1 150°C Rise NEMA 2 aluminum coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	240/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1181
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1182
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1183
		75	(+2, -4: 2.5%)	561	UY74A	9T10A1184
		112.5	(+2, -4: 2.5%)	830	DX75A	9T10A1185
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1186
		225	(+2, -4: 2.5%)	1450	DY77A	9T10A1187
		300	(+2, -4: 2.5%)	1670	DY78A	9T10A1188
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1189

K = 1 150°C Rise NEMA 2 aluminum coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	480Y/277 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1171
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1172
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1173
		75	(+2, -4: 2.5%)	561	UY74A	9T10A1174
		112.5	(+2, -4: 2.5%)	680	DY75A	9T10A1175
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1176
		225	(+2, -4: 2.5%)	1450	DY77A	9T10A1177
		300	(+2, -4: 2.5%)	1670	DY78A	9T10A1178
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1179

General purpose



K = 1 150°C Rise NEMA 2 copper coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	240 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T10C1191
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1192
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1193
		75	(+2, -4: 2.5%)	661	UY74C	9T10C1194
		112.5	(+2, -4: 2.5%)	790	DY75C	9T10C1195
		150	(+2, -4: 2.5%)	1085	DY76C	9T10C1196
		225	(+2, -4: 2.5%)	1610	DY77C	9T10C1197
		300	(+2, -4: 2.5%)	1970	DY78C	9T10C1198

K = 1 150°C Rise NEMA 2 copper coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
600 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T10C2401
		30	(+2, -4: 2.5%)	353	UX72C	9T10C2402
		45	(+2, -4: 2.5%)	480	UX73C	9T10C2403
		75	(+2, -4: 2.5%)	661	UY74C	9T10C2404
		112.5	(+2, -4: 2.5%)	790	DY75C	9T10C2405
		150	(+2, -4: 2.5%)	1085	DY76C	9T10C2406

K = 1 150°C Rise NEMA 2 copper coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T10C1001
		30	(+2, -4: 2.5%)	353	UX02C	9T10C1002
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1003
		75	(+2, -4: 2.5%)	661	UY14C	9T10C1004
		112.5	(+2, -4: 2.5%)	790	DY05C	9T10C1005
		150	(+2, -4: 2.5%)	1085	DY76C	9T10C1006
		225	(+2, -4: 2.5%)	1610	DY77C	9T10C1007
		300	(+2, -4: 2.5%)	1970	DY78C	9T10C1008
		500	(+2, -2: 2.5%)	3720	DX79C	9T10C1009

K = 1 115°C Rise NEMA 2 copper coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T10C1001G31
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1002G31
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1003G31
		75	(+2, -4: 2.5%)	748	DX74C	9T10C1004G31
		112.5	(+2, -4: 2.5%)	900	DX75C	9T10C1005G31
		150	(+2, -4: 2.5%)	1240	DX76C	9T10C1006G31
		225	(+2, -4: 2.5%)	1847	DX77C	9T10C1007G31
		300	(+2, -4: 2.5%)	2150	DX78C	9T10C1008G31

K = 1 80°C Rise NEMA 2 copper coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T10C1001G61
		30	(+2, -4: 2.5%)	480	UX73C	9T10C1002G61
		45	(+2, -4: 2.5%)	661	UY74C	9T10C1003G61
		75	(+2, -4: 2.5%)	790	DY05C	9T10C1004G61
		112.5	(+2, -4: 2.5%)	1085	DY76C	9T10C1005G61
		150	(+2, -4: 2.5%)	1610	DY77C	9T10C1006G61
		225	(+2, -4: 2.5%)	2150	DX78C	9T10C1007G61
		300	(+2, -2: 2.5%)	3720	DX79C	9T10C1008G61

Noise isolation — Guard I™

Product overview



Guard I™ Transformer

Guard I™ noise isolation transformers provide common mode noise reduction between neutral and ground and provides transverse mode noise reduction between the primary and secondary coils. Common causes of electrical noise are electromagnetic interference, radio frequency interference and ground loops.

Features

- Up to 120 dB common mode noise attenuation
- Up to 30 dB transverse mode noise attenuation
- NEMA 1 and/or 2 drip-proof painted enclosure
- Rain shields available for field installation converting the enclosure to NEMA 3R
- NEMA 3R stainless steel (316) available through 150 kVA

Noise isolation — Guard I™



150°C Rise NEMA 2 aluminum coil electrostatic shield three-phase						
Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1001G03
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1002G03
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1003G03
		75	(+2, -4: 2.5%)	561	UY74A	9T10A1004G03
		112.5	(+2, -4: 2.5%)	680	DY75A	9T10A1005G03
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1006G03
		225	(+2, -4: 2.5%)	1450	DY77A	9T10A1007G03
		300	(+2, -4: 2.5%)	1670	DY78A	9T10A1008G03
		500	(+2, -2: 2.5%)	2900	DY79A	9T10A1009G03
750	(+2, -2: 2.5%)	4292	DX67A	9T10A1302G03		
115°C Rise NEMA 2 aluminum coil electrostatic shield three-phase						
Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1001G33
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1002G33
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1003G33
		75	(+2, -4: 2.5%)	603	UX74A	9T10A1004G33
		112.5	(+2, -4: 2.5%)	830	DX75A	9T10A1005G33
		150	(+2, -4: 2.5%)	1250	DX76A	9T10A1006G33
		225	(+2, -4: 2.5%)	1670	DX77A	9T10A1007G33
		300	(+2, -4: 2.5%)	1985	DX78A	9T10A1008G33
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1009G33
80°C Rise NEMA 2 aluminum coil electrostatic shield three-phase						
Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	330	UX72A	9T10A1001G63
		30	(+2, -4: 2.5%)	444	UX73A	9T10A1002G63
		45	(+2, -4: 2.5%)	561	UY74A	9T10A1003G63
		75	(+2, -4: 2.5%)	680	DY75A	9T10A1004G63
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T10A1005G63
		150	(+2, -4: 2.5%)	1450	DY77A	9T10A1006G63
		225	(+2, -4: 2.5%)	1985	DX78A	9T10A1007G63
		300	(+2, -2: 2.5%)	2900	DX79A	9T10A1008G63

Noise isolation — Guard I™



150°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T10C1001G03
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1002G03
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1003G03
		75	(+2, -4: 2.5%)	661	UY74C	9T10C1004G03
		112.5	(+2, -4: 2.5%)	790	DY75C	9T10C1005G03
		150	(+2, -4: 2.5%)	1085	DY76C	9T10C1006G03
		225	(+2, -4: 2.5%)	1610	DY77C	9T10C1007G03
		300	(+2, -4: 2.5%)	1970	DY78C	9T10C1008G03
		500	(+2, -2: 2.5%)	3720	DX79C	9T10C1009G03

115°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T10C1001G33
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1002G33
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1003G33
		75	(+2, -4: 2.5%)	748	UX74C	9T10C1004G33
		112.5	(+2, -4: 2.5%)	900	DX75C	9T10C1005G33
		150	(+2, -4: 2.5%)	1240	DX76C	9T10C1006G33
		225	(+2, -4: 2.5%)	1847	DX77C	9T10C1007G33
		300	(+2, -4: 2.5%)	2150	DX78C	9T10C1008G33
		500	(+2, -2: 2.5%)	3720	DX79C	9T10C1009G33

80°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T10C1001G63
		30	(+2, -4: 2.5%)	480	UX73C	9T10C1002G63
		45	(+2, -4: 2.5%)	661	UY74C	9T10C1003G63
		75	(+2, -4: 2.5%)	790	DY75C	9T10C1004G63
		112.5	(+2, -4: 2.5%)	1085	DY76C	9T10C1005G63
		150	(+2, -4: 2.5%)	1610	DY77C	9T10C1006G63
		225	(+2, -4: 2.5%)	2150	DX78C	9T10C1007G63
		300	(+2, -2: 2.5%)	3720	DX79C	9T10C1008G63



Noise isolation — Guard II™

Product overview



Guard II™ Transformer

Guard II™ noise isolation transformers provide common mode noise attenuation plus an enhanced level of transverse mode noise attenuation for increased protection of sensitive electronic equipment.

Features

- Grounded copper electrostatic shield between primary and secondary windings
- Built-in electrical noise filters and spike/surge suppressors
- Up to 120 dB common mode noise attenuation
- Up to 60 dB transverse mode noise attenuation
- Compliance with applicable UL, ANSI and NEMA standards
- NEMA 2 enclosure

Noise isolation — Guard II™



150°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	260	XV371	9T17A1001G03
		30	(+2, -4: 2.5%)	370	XV372	9T17A1002G03
		45	(+2, -4: 2.5%)	460	XV373	9T17A1003G03
		75	(+2, -4: 2.5%)	680	XV374	9T17A1004G03
		112.5	(+2, -4: 2.5%)	830	XV375	9T17A1005G03

115°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	260	XV371	9T17A1001G33
		30	(+2, -4: 2.5%)	370	XV372	9T17A1002G33
		45	(+2, -4: 2.5%)	460	XV373	9T17A1003G33

80°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	45	(+2, -4: 2.5%)	680	XV374	9T17A1003G63
		75	(+2, -4: 2.5%)	830	XV375	9T17A1004G63

150°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
208 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	260	XV371	9T17A1451G03
		30	(+2, -4: 2.5%)	370	XV372	9T17A1452G03
		45	(+2, -4: 2.5%)	460	XV373	9T17A1453G03
		75	(+2, -4: 2.5%)	680	XV374	9T17A1454G03
		112.5	(+2, -4: 2.5%)	830	XV375	9T17A1455G03

115°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
208 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	260	XV371	9T17A1451G33
		30	(+2, -4: 2.5%)	370	XV372	9T17A1452G33
		45	(+2, -4: 2.5%)	460	XV373	9T17A1453G33
		75	(+2, -4: 2.5%)	680	XV374	9T17A1454G33

80°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
208 Volts Delta	208Y/120 Volts	75	(+2, -4: 2.5%)	830	XV375	9T17A1454G63

Noise isolation — Guard II™



150°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	270	XV371	9T17C1001G03
		30	(+2, -4: 2.5%)	420	XV372	9T17C1002G03
		45	(+2, -4: 2.5%)	540	XV373	9T17C1003G03
		75	(+2, -4: 2.5%)	770	XV374	9T17C1004G03
		112.5	(+2, -4: 2.5%)	1010	XV375	9T17C1005G03

115°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	270	XV371	9T17C1001G33
		30	(+2, -4: 2.5%)	420	XV372	9T17C1002G33
		45	(+2, -4: 2.5%)	540	XV373	9T17C1003G33
		75	(+2, -4: 2.5%)	770	XV374	9T17C1004G33
		112.5	(+2, -4: 2.5%)	1010	XV375	9T17C1005G33

80°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	420	XV372	9T17C1001G63
		30	(+2, -4: 2.5%)	540	XV373	9T17C1002G63
		45	(+2, -4: 2.5%)	770	XV374	9T17C1003G63
		75	(+2, -4: 2.5%)	1010	XV375	9T17C1004G63

150°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
208 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	270	XV371	9T17C1451G03
		30	(+2, -4: 2.5%)	420	XV372	9T17C1452G03
		45	(+2, -4: 2.5%)	540	XV373	9T17C1453G03

115°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
208 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	270	XV371	9T17C1451G33
		30	(+2, -4: 2.5%)	420	XV372	9T17C1452G33
		45	(+2, -4: 2.5%)	540	XV373	9T17C1453G33
		75	(+2, -4: 2.5%)	770	XV374	9T17C1454G33

Harmonic mitigating — Guard III™

Product overview



Guard III™ Transformer

Guard III™ Harmonic Mitigating Transformers help eliminate harmonics, improve power quality, and help save energy by reducing the energy (heating) losses. They maintain DOE 2016 energy efficiency even when harmonics are present.

Power supplies that convert AC to DC current – for plant floor equipment, computers, copiers, electronic ballasts, and others – generate harmonics that create an irregular current waveform. These harmonics, in turn, create power quality problems such as overheated transformers, motors and neutral wires; nuisance breaker trips; and electronic equipment malfunction and failure.

Features

- 0° Phase shift; +15° Phase Shift; -15° Phase Shift or -30° Phase Shift
- Copper windings
- K-factor load profile of 20
- Crest factor load profile of 5
- NEMA 1 and/or 2 drip-proof enclosure
- Rain shield available for field conversion to NEMA 3R
- NEMA 3R stainless steel (Type 316) up through 150 kVA

Harmonic mitigating — Guard III™



150°C Rise NEMA 2, 0° phase shift copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	318	H371C	9T76H9871G03
		30	552	H372C	9T76H9872G03
		45	643	H373C	9T76H9873G03
		75	1053	H374C	9T76H9874G03
		112.5	1980	H375C	9T76H9875G03
		150	2125	H376C	9T76H9876G03
		300	3170	YF378	9T76H9878G03

150°C Rise NEMA 2, -30° phase shift copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	318	H371C	9T77H9871G03
		30	552	H372C	9T77H9872G03
		45	643	H373C	9T77H9873G03
		75	1053	H374C	9T77H9874G03
		112.5	1980	H375C	9T77H9875G03
		150	2125	H376C	9T77H9876G03
		300	3170	YF378	9T77H9878G03

150° C Rise NEMA 2, +15° phase shift copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	112.5	1980	H375C	9T79H9875G03

150° C Rise NEMA 2, -15° phase shift copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	112.5	1980	H375C	9T78H9875G03

K-factor

Product overview



Type QL, UL K-factor Transformer

K-factor is a standardized way to indicate the ability of a transformer to withstand harmonics. These units shall not exceed rated winding temperature rise at full load and rated K-factor. Neutrals and lugs are capable of handling 200% of rated secondary full load current.

Full-width copper electrostatic shielding is standard on all ABB K-factor rated transformers. Effective coupling capacitance is 30 pf. Common mode noise attenuation averages up to 120 dB, and transverse mode noise attenuation averages up to 30 dB.

Features

- Full-width copper electrostatic shielding standard
- Unique core and coil design using grain-oriented silicon steel
- Core and coil assemblies mounted on rubber isolation pads
- Single piece front/back
- Outward-facing feet
- Lifting eyes provided in the top clamp
- Lug kit included up through 150kVA
- Copper ground bar kit included up through 150kVA
- Copper ground strap



K-factor



K=4 150°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T14A1001G03
		30	(+2, -4: 2.5%)	444	UX73A	9T14A1002G03
		45	(+2, -4: 2.5%)	444	UX73A	9T14A1003G03
		75	(+2, -4: 2.5%)	680	DY75A	9T14A1004G03
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T14A1005G03
		150	(+2, -4: 2.5%)	1250	DX76A	9T14A1006G03
		225	(+2, -4: 2.5%)	1670	DY78A	9T14A1007G03
		300	(+2, -2: 2.5%)	2900	DY79A	9T14A1008G03

K=4 115°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T14A1001G33
		30	(+2, -4: 2.5%)	444	UX73A	9T14A1002G33
		45	(+2, -4: 2.5%)	561	UY74A	9T14A1003G33
		75	(+2, -4: 2.5%)	680	DY75A	9T14A1004G33
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T14A1005G33
		150	(+2, -4: 2.5%)	1250	DX76A	9T14A1006G33
		225	(+2, -4: 2.5%)	1670	DY78A	9T14A1007G33
		300	(+2, -2: 2.5%)	2900	DY79A	9T14A1008G33

K=4 80°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	30	(+2, -4: 2.5%)	444	UX73A	9T14A1002G63
		45	(+2, -4: 2.5%)	561	UY74A	9T14A1003G63
		75	(+2, -4: 2.5%)	830	DX75A	9T14A1004G63
		112.5	(+2, -4: 2.5%)	1250	DX76A	9T14A1005G63

K=13 150°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	45	(+2, -4: 2.5%)	444	UX73A	9T11A1003G03
		75	(+2, -4: 2.5%)	603	DY75A	9T11A1004G03
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T11A1005G03
		150	(+2, -4: 2.5%)	1250	DX76A	9T11A1006G03
		225	(+2, -4: 2.5%)	1670	DY78A	9T11A1007G03
		300	(+2, -2: 2.5%)	2900	DY79A	9T11A1008G03
		500	(+2, -2: 2.5%)	4292	DY67A	9T11A1009G03

K=13 115°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	30	(+2, -4: 2.5%)	444	UX73A	9T11A1002G33
		75	(+2, -4: 2.5%)	680	DY75A	9T11A1004G33
		112.5	(+2, -4: 2.5%)	1250	DX76A	9T11A1005G33
		150	(+2, -4: 2.5%)	1450	DY77A	9T11A1006G33
		225	(+2, -4: 2.5%)	1670	DY78A	9T11A1007G33
		300	(+2, -2: 2.5%)	2900	DY79A	9T11A1008G33

K=13 80°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	30	(+2, -4: 2.5%)	561	UX73A	9T11A1002G63
		45	(+2, -4: 2.5%)	561	UY74A	9T11A1003G63
		75	(+2, -4: 2.5%)	830	DX75A	9T11A1004G63
		112.5	(+2, -4: 2.5%)	1670	DX77A	9T11A1005G63
		150	(+2, -4: 2.5%)	1670	DX77A	9T11A1006G63
		225	(+2, -2: 2.5%)	2900	DX79A	9T11A1007G63

K-factor



K=20 150°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	45	(+2, -4: 2.5%)	561	UY74A	9T12A1003G03
		75	(+2, -4: 2.5%)	¹	¹	9T12A1004G03
		112.5	(+2, -4: 2.5%)	1250	DX76A	9T12A1005G03
		150	(+2, -4: 2.5%)	1450	DY77A	9T12A1006G03
		225	(+2, -4: 2.5%)	1670	DY78A	9T12A1007G03

K=20 115°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	30	(+2, -4: 2.5%)	561	UY74A	9T12A1003G33
		75	(+2, -4: 2.5%)	680	DY75A	9T12A1004G33
		112.5	(+2, -4: 2.5%)	¹	¹	9T12A1005G33
		150	(+2, -4: 2.5%)	¹	¹	9T12A1006G33
		225	(+2, -4: 2.5%)	¹	¹	9T12A1007G33
		300	(+2, -4: 2.5%)	¹	¹	9T12A1008G33

K=20 80°C Rise NEMA 2 aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	30	(+2, -4: 2.5%)	¹	¹	9T12A1002G63
		45	(+2, -4: 2.5%)	¹	¹	9T12A1003G63
		75	(+2, -4: 2.5%)	830	DX75A	9T12A1004G63
		112.5	(+2, -4: 2.5%)	¹	¹	9T12A1005G63
		150	(+2, -4: 2.5%)	1670	DX77A	9T12A1006G63
		225	(+2, -4: 2.5%)	¹	¹	9T12A1007G63
		300	(+2, -4: 2.5%)	¹	¹	9T12A1008G63

¹Contact Customer Service for more information on these transformers.

K-factor



K=4 150°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T14C1001G03
		30	(+2, -4: 2.5%)	353	UX72C	9T14C1002G03
		45	(+2, -4: 2.5%)	480	UX73C	9T14C1003G03
		75	(+2, -4: 2.5%)	661	UY74C	9T14C1004G03
		112.5	(+2, -4: 2.5%)	790	DY75C	9T14C1005G03
		150	(+2, -4: 2.5%)	1610	DY77C	9T14C1006G03
		225	(+2, -4: 2.5%)	1847	DX77C	9T14C1007G03
		300	(+2, -2: 2.5%)	3720	DX78C	9T14C1008G03

K=4 115°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T14C1001G33
		30	(+2, -4: 2.5%)	480	UX73C	9T14C1002G33
		45	(+2, -4: 2.5%)	661	UY74C	9T14C1003G33
		75	(+2, -4: 2.5%)	748	UX74C	9T14C1004G33
		112.5	(+2, -4: 2.5%)	900	DX75C	9T14C1005G33
		150	(+2, -4: 2.5%)	1610	DY77C	9T14C1006G33
		225	(+2, -4: 2.5%)	2150	DX78C	9T14C1007G33
		300	(+2, -2: 2.5%)	3720	DX79C	9T14C1008G33
		500	(+2, -2: 2.5%)	¹	¹	9T14C1009G33

K=4 80°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T14C1001G63
		30	(+2, -4: 2.5%)	480	UX73C	9T14C1002G63
		45	(+2, -4: 2.5%)	661	UY74C	9T14C1003G63
		75	(+2, -4: 2.5%)	790	DY75C	9T14C1004G63
		112.5	(+2, -4: 2.5%)	1085	DY76C	9T14C1005G63
		150	(+2, -4: 2.5%)	1610	DY77C	9T14C1006G63
		225	(+2, -4: 2.5%)	2150	DX78C	9T14C1007G63
		300	(+2, -2: 2.5%)	3720	DX79C	9T14C1008G63

¹Contact Customer Service for more information on these transformers.

K-factor



K=13 150°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T11C1001G03
		30	(+2, -4: 2.5%)	353	UX72C	9T11C1002G03
		45	(+2, -4: 2.5%)	480	UX73C	9T11C1003G03
		75	(+2, -4: 2.5%)	790	DY75C	9T11C1004G03
		112.5	(+2, -4: 2.5%)	790	DY75C	9T11C1005G03
		150	(+2, -4: 2.5%)	1610	DY77C	9T11C1006G03
		225	(+2, -4: 2.5%)	2150	DX78C	9T11C1007G03
		300	(+2, -2: 2.5%)	3720	DX79C	9T11C1008G03

K=13 115°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T11C1001G33
		30	(+2, -4: 2.5%)	480	UX73C	9T11C1002G33
		45	(+2, -4: 2.5%)	661	UY74C	9T11C1003G33
		75	(+2, -4: 2.5%)	790	DY75C	9T11C1004G33
		112.5	(+2, -4: 2.5%)	1085	DY76C	9T11C1005G33
		150	(+2, -4: 2.5%)	1610	DY77C	9T11C1006G33
		225	(+2, -4: 2.5%)	3720	DX78C	9T11C1007G33
		300	(+2, -2: 2.5%)	3720	DX79C	9T11C1008G33
		500	(+2, -2: 2.5%)	¹	¹	9T11C1009G33

K=13 80°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T11C1001G63
		30	(+2, -4: 2.5%)	480	UX73C	9T11C1002G63
		45	(+2, -4: 2.5%)	661	UY74C	9T11C1003G63
		75	(+2, -4: 2.5%)	790	DY75C	9T11C1004G63
		112.5	(+2, -4: 2.5%)	1085	DY77C	9T11C1005G63
		150	(+2, -4: 2.5%)	1610	DY77C	9T11C1006G63
		225	(+2, -2: 2.5%)	3720	DX79C	9T11C1007G63
		300	(+2, -4: 2.5%)	¹	¹	9T11C1008G63

¹Contact Customer Service for more information on these transformers.

K-factor



K=20 150°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T12C1001G03
		30	(+2, -4: 2.5%)	480	UX73C	9T12C1002G03
		45	(+2, -4: 2.5%)	661	UY74C	9T12C1003G03
		75	(+2, -4: 2.5%)	790	DY75C	9T12C1004G03
		112.5	(+2, -4: 2.5%)	1085	DY76C	9T12C1005G03
		150	(+2, -4: 2.5%)	¹	¹	9T12C1006G03
		225	(+2, -4: 2.5%)	¹	¹	9T12C1007G03
		300	(+2, -4: 2.5%)	¹	¹	9T12C1008G03

K=20 115°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T12C1001G33
		30	(+2, -4: 2.5%)	¹	¹	9T12C1002G33
		45	(+2, -4: 2.5%)	661	UY74C	9T12C1003G33
		75	(+2, -4: 2.5%)	790	DY75C	9T12C1004G33
		112.5	(+2, -4: 2.5%)	¹	¹	9T12C1005G33
		150	(+2, -4: 2.5%)	¹	¹	9T12C1006G33
		225	(+2, -4: 2.5%)	2150	DX78C	9T12C1007G33
		300	(+2, -4: 2.5%)	¹	¹	9T12C1008G33

K=20 80°C Rise NEMA 2 copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	¹	¹	9T12C1001G63
		30	(+2, -4: 2.5%)	480	UX73C	9T12C1002G63
		45	(+2, -4: 2.5%)	¹	¹	9T12C1003G63
		75	(+2, -4: 2.5%)	¹	¹	9T12C1004G63
		112.5	(+2, -4: 2.5%)	¹	¹	9T12C1005G63
		150	(+2, -4: 2.5%)	¹	¹	9T12C1006G63

¹Contact Customer Service for more information on these transformers.

K-factor low noise (-3 dB below NEMA ST-20 standard)



K=4 150°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T14A1001G04
		30	(+2, -4: 2.5%)	444	UX73A	9T14A1002G04
		45	(+2, -4: 2.5%)	444	UX73A	9T14A1003G04
		75	(+2, -4: 2.5%)	603	DY75A	9T14A1004G04
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T14A1005G04
		150	(+2, -4: 2.5%)	1250	DX76A	9T14A1006G04
		225	(+2, -4: 2.5%)	1670	DY78A	9T14A1007G04
		300	(+2, -2: 2.5%)	2900	DY79A	9T14A1008G04

K=4 115°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T14A1001G34
		30	(+2, -4: 2.5%)	444	UX73A	9T14A1002G34
		45	(+2, -4: 2.5%)	561	UY74A	9T14A1003G34
		75	(+2, -4: 2.5%)	680	DY75A	9T14A1004G34
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T14A1005G34
		150	(+2, -4: 2.5%)	1250	DX76A	9T14A1006G34
		225	(+2, -4: 2.5%)	1670	DY78A	9T14A1007G34
		300	(+2, -2: 2.5%)	2900	DY79A	9T14A1008G34

K=4 80°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	112.5	(+2, -4: 2.5%)	1250	DX76A	9T14A1005G64
		150	(+2, -4: 2.5%)	1670	DX77A	9T14A1006G64

K=13 150°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T11A1001G04
		30	(+2, -4: 2.5%)	444	UX73A	9T11A1002G04
		45	(+2, -4: 2.5%)	444	UX73A	9T11A1003G04
		75	(+2, -4: 2.5%)	603	DY75A	9T11A1004G04
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T11A1005G04
		150	(+2, -4: 2.5%)	1250	DX76A	9T11A1006G04
		225	(+2, -4: 2.5%)	1670	DY78A	9T11A1007G04
		300	(+2, -2: 2.5%)	2900	DY79A	9T11A1008G04

K=13 115°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T11A1001G34
		30	(+2, -4: 2.5%)	444	UX73A	9T11A1002G34
		45	(+2, -4: 2.5%)	561	UY74A	9T11A1003G34
		75	(+2, -4: 2.5%)	680	DY75A	9T11A1004G34
		112.5	(+2, -4: 2.5%)	1250	DX76A	9T11A1005G34
		150	(+2, -4: 2.5%)	1450	DY77A	9T11A1006G34
		225	(+2, -4: 2.5%)	1670	DY78A	9T11A1007G34
		300	(+2, -2: 2.5%)	2900	DY79A	9T11A1008G34

K=13 80°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	30	(+2, -4: 2.5%)	561	UX73A	9T11A1002G64
		45	(+2, -4: 2.5%)	561	UY74A	9T11A1003G64
		75	(+2, -4: 2.5%)	680	DY75A	9T11A1004G64
		112.5	(+2, -4: 2.5%)	1670	DX77A	9T11A1005G64

K-factor low noise (-3 dB below NEMA ST-20 standard)



K=20 150°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	¹	¹	9T12A1001G04
		30	(+2, -4: 2.5%)	¹	¹	9T12A1002G04
		45	(+2, -4: 2.5%)	¹	¹	9T12A1003G04
		75	(+2, -4: 2.5%)	¹	¹	9T12A1004G04
		112.5	(+2, -4: 2.5%)	¹	¹	9T12A1005G04
		150	(+2, -4: 2.5%)	¹	¹	9T12A1006G04
		225	(+2, -4: 2.5%)	¹	¹	9T12A1007G04

K=20 115°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	¹	¹	9T12A1001G34
		30	(+2, -4: 2.5%)	¹	¹	9T12A1002G34
		45	(+2, -4: 2.5%)	¹	¹	9T12A1003G34
		75	(+2, -4: 2.5%)	¹	¹	9T12A1004G34
		112.5	(+2, -4: 2.5%)	¹	¹	9T12A1005G34

K=20 80°C Rise aluminum coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	¹	¹	9T12A1001G64
		30	(+2, -4: 2.5%)	¹	¹	9T12A1002G64
		45	(+2, -4: 2.5%)	¹	¹	9T12A1003G64
		75	(+2, -4: 2.5%)	¹	¹	9T12A1004G64
		112.5	(+2, -4: 2.5%)	¹	¹	9T12A1005G64

¹Contact Customer Service for more information on these transformers.

K-factor low noise (-3 dB below NEMA ST-20 standard)



K=4 150°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T14C1001G04
		30	(+2, -4: 2.5%)	353	UX72C	9T14C1002G04
		45	(+2, -4: 2.5%)	480	UX73C	9T14C1003G04
		75	(+2, -4: 2.5%)	661	UY74C	9T14C1004G04
		112.5	(+2, -4: 2.5%)	790	DY75C	9T14C1005G04
		150	(+2, -4: 2.5%)	1610	DY77C	9T14C1006G04
		225	(+2, -4: 2.5%)	1970	DX77C	9T14C1007G04
		300	(+2, -2: 2.5%)	3720	DX78C	9T14C1008G04

K=4 115°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T14C1001G34
		30	(+2, -4: 2.5%)	353	UX73C	9T14C1002G34
		45	(+2, -4: 2.5%)	661	UY74C	9T14C1003G34
		75	(+2, -4: 2.5%)	790	UX74C	9T14C1004G34
		112.5	(+2, -4: 2.5%)	900	DX75C	9T14C1005G34
		150	(+2, -4: 2.5%)	1610	DY77C	9T14C1006G34
		225	(+2, -4: 2.5%)	2150	DX78C	9T14C1007G34
		300	(+2, -2: 2.5%)	3720	DX79C	9T14C1008G34

K=4 80°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T14C1001G64
		30	(+2, -4: 2.5%)	480	UX73C	9T14C1002G64
		45	(+2, -4: 2.5%)	661	UY74C	9T14C1003G64
		75	(+2, -4: 2.5%)	790	DY75C	9T14C1004G64
		112.5	(+2, -4: 2.5%)	1240	DY76C	9T14C1005G64

K=13 150°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T11C1001G04
		30	(+2, -4: 2.5%)	353	UX72C	9T11C1002G04
		45	(+2, -4: 2.5%)	480	UX73C	9T11C1003G04
		75	(+2, -4: 2.5%)	790	DY75C	9T11C1004G04
		112.5	(+2, -4: 2.5%)	790	DY75C	9T11C1005G04
		150	(+2, -4: 2.5%)	1610	DY77C	9T11C1006G04
		225	(+2, -4: 2.5%)	1970	DX78C	9T11C1007G04
		300	(+2, -2: 2.5%)	3720	DX79C	9T11C1008G04

K=13 115°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T11C1001G34
		30	(+2, -4: 2.5%)	480	UX73C	9T11C1002G34
		45	(+2, -4: 2.5%)	661	UY74C	9T11C1003G34
		75	(+2, -4: 2.5%)	790	DY75C	9T11C1004G34
		112.5	(+2, -4: 2.5%)	1085	DY76C	9T11C1005G34
		150	(+2, -4: 2.5%)	1610	DY77C	9T11C1006G34
		225	(+2, -2: 2.5%)	3720	DX78C	9T11C1007G34
		300	(+2, -2: 2.5%)	3720	DX79C	9T11C1008G34

K=13 80°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T11C1001G64
		30	(+2, -4: 2.5%)	661	UX73C	9T11C1002G64
		45	(+2, -4: 2.5%)	661	UY74C	9T11C1003G64
		75	(+2, -4: 2.5%)	790	DY75C	9T11C1004G64
		112.5	(+2, -4: 2.5%)	1240	DX76C	9T11C1005G64
		150	(+2, -4: 2.5%)	1610	DY77C	9T11C1006G64
		225	(+2, -2: 2.5%)	3720	DX79C	9T11C1007G64

K-factor low noise (-3 dB below NEMA ST-20 standard)



K=20 150°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	¹	¹	9T12C1001G04
		30	(+2, -4: 2.5%)	¹	¹	9T12C1002G04
		45	(+2, -4: 2.5%)	¹	¹	9T12C1003G04
		75	(+2, -4: 2.5%)	¹	¹	9T12C1004G04
		112.5	(+2, -4: 2.5%)	1085	DY76C	9T12C1005G04
		150	(+2, -4: 2.5%)	¹	¹	9T12C1006G04

K=20 115°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T12C1001G34
		30	(+2, -4: 2.5%)	¹	¹	9T12C1002G34
		45	(+2, -4: 2.5%)	¹	¹	9T12C1003G34
		75	(+2, -4: 2.5%)	¹	¹	9T12C1004G34
		112.5	(+2, -4: 2.5%)	¹	¹	9T12C1005G34
		150	(+2, -4: 2.5%)	¹	¹	9T12C1006G34

K=20 80°C Rise copper coil electrostatic shield three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	¹	¹	9T12C1001G64
		30	(+2, -4: 2.5%)	¹	¹	9T12C1002G64
		45	(+2, -4: 2.5%)	¹	¹	9T12C1003G64
		75	(+2, -4: 2.5%)	¹	¹	9T12C1004G64
		112.5	(+2, -4: 2.5%)	¹	¹	9T12C1005G64

¹Contact Customer Service for more information on these transformers.

Low noise (-3 dB below NEMA ST-20 standard)

Product overview



Type QL Low Noise Transformer

Low noise transformers are designed to operate at reduced noise levels. The vibrations within the magnetic steel core have been greatly reduced, thus lowering the humming of the transformer 3dB less than NEMA/ANSI standards.

Although they are quieter, installation can greatly influence their noise level. Closets and corners should be avoided as they act as megaphones by seemingly increasing noise levels. Care should be taken in following acoustical principles and proper installation procedures.

Features

- Unique core and coil design using grain-oriented silicon steel
- Core and coil assemblies mounted on rubber isolation pads
- Single piece front/back
- Outward facing feet
- Lifting eyes provided in top clamp
- Lug kit included up through 150kVA
- Copper ground bar kit included up through 150kVA
- Copper ground strap



Low noise (-3 dB below NEMA ST-20 standard)



150°C Rise NEMA 2 aluminum coil three-phase						
Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1001G02
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1002G02
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1003G02
		75	(+2, -4: 2.5%)	561	UY74A	9T10A1004G02
		112.5	(+2, -4: 2.5%)	680	DY05A	9T10A1005G02
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1006G02
		225	(+2, -4: 2.5%)	1450	DY17A	9T10A1007G02
		300	(+2, -4: 2.5%)	1670	DY08A	9T10A1008G02
		500	(+2, -2: 2.5%)	2900	DY79A	9T10A1009G02
115°C Rise NEMA 2 aluminum coil three-phase						
Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	231	UX71A	9T10A1001G32
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1002G32
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1003G32
		75	(+2, -4: 2.5%)	603	UX74C	9T10A1004G32
		112.5	(+2, -4: 2.5%)	830	DX75A	9T10A1005G32
		150	(+2, -4: 2.5%)	1250	DX76A	9T10A1006G32
		225	(+2, -4: 2.5%)	1670	DX77A	9T10A1007G32
		300	(+2, -4: 2.5%)	1985	DX78A	9T10A1008G32
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1009G32
80°C Rise NEMA 2 aluminum coil three-phase						
Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	330	UX72A	9T10A1001G62
		30	(+2, -4: 2.5%)	444	UX73A	9T10A1002G62
		45	(+2, -4: 2.5%)	561	UY74A	9T10A1003G62
		75	(+2, -4: 2.5%)	680	DY05A	9T10A1004G62
		112.5	(+2, -4: 2.5%)	1030	DY76A	9T10A1005G62
		150	(+2, -4: 2.5%)	1450	DY17A	9T10A1006G62
		225	(+2, -4: 2.5%)	1985	DX78A	9T10A1007G62
		300	(+2, -2: 2.5%)	2900	DY79A	9T10A1008G62

Low noise (-3 dB below NEMA ST-20 standard)



150°C Rise NEMA 2 copper coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T10C1001G02
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1002G02
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1003G02
		75	(+2, -4: 2.5%)	661	UY74C	9T10C1004G02
		112.5	(+2, -4: 2.5%)	790	DY05C	9T10C1005G02
		150	(+2, -4: 2.5%)	1085	DY76C	9T10C1006G02
		225	(+2, -4: 2.5%)	1610	DY77C	9T10C1007G02
		300	(+2, -4: 2.5%)	1970	DY78C	9T10C1008G02
		500	(+2, -2: 2.5%)	3720	DX79C	9T10C1009G02

115°C Rise NEMA 2 copper coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	230	UX71C	9T10C1001G32
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1002G32
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1003G32
		75	(+2, -4: 2.5%)	748	DX74C	9T10C1004G32
		112.5	(+2, -4: 2.5%)	900	DX75C	9T10C1005G32
		150	(+2, -4: 2.5%)	1240	DX76C	9T10C1006G32
		225	(+2, -4: 2.5%)	1847	DX77C	9T10C1007G32
		300	(+2, -4: 2.5%)	2150	DX78C	9T10C1008G32
		500	(+2, -2: 2.5%)	3720	DX79C	9T10C1009G32

80°C Rise NEMA 2 copper coil three-phase

Input voltage	Output voltage	kVA	Taps	Approx. net weight (Lbs)	Frame size	Ordering code
480 Volts Delta	208Y/120 Volts	15	(+2, -4: 2.5%)	353	UX72C	9T10C1001G62
		30	(+2, -4: 2.5%)	480	UX73C	9T10C1002G62
		45	(+2, -4: 2.5%)	661	UY74C	9T10C1003G62
		75	(+2, -4: 2.5%)	790	DY05C	9T10C1004G62
		112.5	(+2, -4: 2.5%)	1085	DY76C	9T10C1005G62
		150	(+2, -4: 2.5%)	1610	DY77C	9T10C1006G62
		225	(+2, -4: 2.5%)	2150	DX78C	9T10C1007G62
		300	(+2, -2: 2.5%)	3720	DX79C	9T10C1008G62



Midtapped

Product overview



Type QL Midtapped Transformer

ABB Type QL midtapped transformer enables the user to transform three-phase power from 480 Volts primary to 240 Volts secondary and have 120 Volt, reduced capacity tap (RCT) single-phase capability as well. This is because a single-phase midtap is brought out of one coil of the unit's three-phase secondary winding. These transformers are UL listed, File E-79145.

The Type QL midtapped design can be used wherever there is 480 Volt, three-phase supply available and the load is primarily 240 Volt three-phase with a nominal amount of 120 Volt, single-phase power required. Normally, in this instance, a small single-phase as well as a three-phase transformer would

be required to provide the necessary transformation.

Caution: When utilizing the 120 Volt midtap for single-phase applications, the single-phase load should not exceed 5 percent of the three-phase kVA rating. The three-phase kVA load must be reduced by the same percentage as that added by the single-phase load. Additional loading beyond 5 percent may cause the transformer to overheat and fail. If the single-phase load is in excess of 5 percent, it is recommended that a separate single-phase unit be used to handle the load.

Midtapped



150°C Rise 60Hz aluminum three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	231	UX71A	9T10A1181
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1182
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1183
		75	(+2, -4: 2.5%)	561	UY74A	9T10A1184
		112.5	(+2, -4: 2.5%)	830	DX75A	9T10A1185
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1186
		225	(+2, -4: 2.5%)	1450	DY77A	9T10A1187
		300	(+2, -4: 2.5%)	1670	DY78A	9T10A1188
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1189

115°C Rise 60Hz aluminum three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	231	UX71A	9T10A1181G31
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1182G31
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1183G31
		75	(+2, -4: 2.5%)	603	UX74A	9T10A1184G31
		112.5	(+2, -4: 2.5%)	830	DX75A	9T10A1185G31
		150	(+2, -4: 2.5%)	1250	DX76A	9T10A1186G31
		225	(+2, -4: 2.5%)	1670	DX77A	9T10A1187G31
		300	(+2, -4: 2.5%)	1985	DX78A	9T10A1188G31
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1189G31

80°C Rise 60Hz aluminum three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	330	UX72A	9T10A1181G61
		30	(+2, -4: 2.5%)	444	UX73A	9T10A1182G61
		45	(+2, -4: 2.5%)	561	UY74A	9T10A1183G61
		75	(+2, -4: 2.5%)	680	DY75A	9T10A1184G61
		150	(+2, -4: 2.5%)	1450	DY77A	9T10A1186G61
		225	(+2, -4: 2.5%)	1985	DX78A	9T10A1187G61

150°C Rise 60Hz Low Noise (-3dB) aluminum three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	231	UX71A	9T10A1181G02
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1182G02
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1183G02
		75	(+2, -4: 2.5%)	561	UY74A	9T10A1184G02
		112.5	(+2, -4: 2.5%)	680	DX75A	9T10A1185G02
		150	(+2, -4: 2.5%)	1030	DY76A	9T10A1186G02
		225	(+2, -4: 2.5%)	1450	DY77A	9T10A1187G02
		300	(+2, -4: 2.5%)	1670	DY78A	9T10A1188G02
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1189G02

115°C Rise 60Hz Low Noise (-3dB) aluminum three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	231	UX71A	9T10A1181G32
		30	(+2, -4: 2.5%)	330	UX72A	9T10A1182G32
		45	(+2, -4: 2.5%)	444	UX73A	9T10A1183G32
		75	(+2, -4: 2.5%)	603	UX74A	9T10A1184G32
		112.5	(+2, -4: 2.5%)	830	DX75A	9T10A1185G32
		150	(+2, -4: 2.5%)	1250	DX76A	9T10A1186G32
		225	(+2, -4: 2.5%)	1670	DX77A	9T10A1187G32
		300	(+2, -4: 2.5%)	1985	DX78A	9T10A1188G32
		500	(+2, -2: 2.5%)	2900	DX79A	9T10A1189G32

Midtapped



150°C Rise 60Hz copper three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	230	UX71C	9T10C1181
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1182
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1183
		75	(+2, -4: 2.5%)	661	UY74C	9T10C1184
		112.5	(+2, -4: 2.5%)	790	DY75C	9T10C1185
		150	(+2, -4: 2.5%)	1085	DY76C	9T10C1186
		225	(+2, -4: 2.5%)	1610	DY77C	9T10C1187
		300	(+2, -4: 2.5%)	1970	DY78C	9T10C1188
		500	(+2, -2: 2.5%)	3720	DX79C	9T10C1189

115°C Rise 60Hz copper three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	230	UX71C	9T10C1181G31
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1182G31
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1183G31
		75	(+2, -4: 2.5%)	748	UX74C	9T10C1184G31
		112.5	(+2, -4: 2.5%)	900	DX75C	9T10C1185G31
		150	(+2, -4: 2.5%)	1240	DX76C	9T10C1186G31
		300	(+2, -4: 2.5%)	2150	DX78C	9T10C1188G31
		500	(+2, -2: 2.5%)	3720	DX79C	9T10C1189G31

80°C Rise 60Hz copper three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	353	UX72C	9T10C1181G61
		30	(+2, -4: 2.5%)	480	UX73C	9T10C1182G61
		45	(+2, -4: 2.5%)	661	UY74C	9T10C1183G61
		75	(+2, -4: 2.5%)	790	DY75C	9T10C1184G61
		225	(+2, -4: 2.5%)	2150	DX78C	9T10C1187G61

150°C Rise 60Hz Low Noise (-3dB) copper three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	230	UX71C	9T10C1181G02
		30	(+2, -4: 2.5%)	353	UX72C	9T10C1182G02
		45	(+2, -4: 2.5%)	480	UX73C	9T10C1183G02
		75	(+2, -4: 2.5%)	661	UY74C	9T10C1184G02
		112.5	(+2, -4: 2.5%)	790	DY75C	9T10C1185G02
		225	(+2, -4: 2.5%)	1610	DY77C	9T10C1187G02

115°C Rise 60Hz Low Noise (-3dB) copper three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	75	(+2, -4: 2.5%)	748	UX74C	9T10C1184G32
		112.5	(+2, -4: 2.5%)	900	DX75C	9T10C1185G32

80°C Rise 60Hz Low Noise (-3dB) copper three-phase

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	240/120	15	(+2, -4: 2.5%)	353	UX72C	9T10C1181G62
		30	(+2, -4: 2.5%)	480	UX73C	9T10C1182G62
		75	(+2, -4: 2.5%)	790	DY75C	9T10C1184G62
		150	(+2, -4: 2.5%)	1610	DY77C	9T10C1186G62

Drive isolation

Product overview



Drive isolation

The use of thyristor control circuitry with adjustable-speed drives has resulted in a need for a line of isolation transformers specifically designed to meet the demanding power supply requirements of thyristor controlled drives. Symmetrically placed taps and added coil bracing minimize mechanical forces caused by the often severe thyristor drive duty cycles. These reinforcing features also help protect the transformer from the regenerative duty cycles and more frequent temporary short-circuits associated with thyristor drives.

Isolation transformers also reduce line-pollution feedback resulting from thyristor firing circuits. The ABB delta-wye designs meet the NEC requirements for grounded secondary neutrals that isolate primary dis-

tribution systems. kVA ratings of the DIT line cover most dc motor requirements from 3 to 1000 hp.

The enclosed drive isolation transformers are UL listed and are excluded from the DOE 2016 regulations.

Features

- Unique core and coil design using grain-oriented silicon steel
- Core and coil assemblies mounted on rubber isolation pads
- Single piece front/back
- Lug kit included up through 145 kVA
- Copper ground bar kit included up through 145 kVA
- Copper ground strap

Drive isolation



15 - 220 kVA Indoor Type QL UL Listed aluminum three-phase

Input voltage	Output voltage	kVA	Frequency (Hz)	Weight (Lbs)	Frame size	Ordering code
230 Volts Delta	230Y/133 Volts	15	60Hz	240	XV371	9T83B4000G29
		20	60Hz	334	XV372	9T83B4001G29
		27	60Hz	334	XV372	9T83B4002G29
		34	60Hz	334	XV373	9T83B4003G29
		40	60Hz	415	XV373	9T83B4004G29
		51	60Hz	415	XV373	9T83B4005G29
		75	60Hz	620	XV374	9T83B4007G29
		93	60Hz	765	XV375	9T83B4008G29
230 Volts Delta	460Y/266 Volts	118	60Hz	1070	XV376	9T83B4009G29
		15	60Hz	240	XV371	9T83B4000G28
		20	60Hz	334	XV372	9T83B4001G28
		27	60Hz	334	XV372	9T83B4002G28
		34	60Hz	334	XV372	9T83B4003G28
		63	60Hz	620	XV374	9T83B4006G28
		93	60Hz	765	XV375	9T83B4008G28
		118	60Hz	1070	XV376	9T83B4009G28
460 Volts Delta	230Y/133	145	60Hz	1070	XV376	9T83B4010G28
		175	60Hz	1590	XV377	9T83B4011G28
		15	60 Hz	240	XV371	9T83B4000G23
		20	60 Hz	334	XV372	9T83B4001G23
		27	60 Hz	334	XV372	9T83B4002G23
		34	60 Hz	415	XV373	9T83B4003G23
		40	60 Hz	415	XV373	9T83B4004G23
		51	60 Hz	415	XV373	9T83B4005G23
460 Volts Delta	460Y/266	63	60 Hz	620	XV374	9T83B4006G23
		75	60 Hz	620	XV374	9T83B4007G23
		93	60 Hz	765	XV375	9T83B4008G23
		118	60 Hz	1070	XV376	9T83B4009G23
		145	60 Hz	1070	XV376	9T83B4010G23
		220	60 Hz	1590	XV377	9T83B4012G23
		15	60 Hz	240	XV371	9T83B4000G22
		20	60 Hz	334	XV372	9T83B4001G22
		27	60 Hz	334	XV372	9T83B4002G22
		34	60 Hz	415	XV373	9T83B4003G22
		40	60 Hz	415	XV373	9T83B4004G22
		51	60 Hz	415	XV373	9T83B4005G22
575 Volts Delta	230Y/133	63	60 Hz	620	XV374	9T83B4006G22
		75	60 Hz	620	XV374	9T83B4007G22
		93	60 Hz	765	XV375	9T83B4008G22
		118	60 Hz	1070	XV376	9T83B4009G22
		145	60 Hz	1070	XV376	9T83B4010G22
		175	60 Hz	1590	XV377	9T83B4011G22
		220	60 Hz	1590	XV377	9T83B4012G22
		20	60 Hz	334	XV372	9T83B4001G27
		63	60 Hz	620	XV374	9T83B4006G27
		75	60 Hz	620	XV374	9T83B4007G27
		118	60 Hz	1070	XV376	9T83B4009G27
		575 Volts Delta	460Y/266	15	60 Hz	240
27	60 Hz			324	XV372	9T83B4002G26
34	60 Hz			415	XV373	9T83B4003G26
51	60 Hz			620	XV374	9T83B4005G26
145	60 Hz			1070	XV376	9T83B4010G26
175	60 Hz			1590	XV377	9T83B4011G26
220	60 Hz			1590	XV377	9T83B4012G26

NOTE: Full capacity symmetrical taps (1) +5% and (1) -5%, in primary windings for 230 and 460 Y thru 550 kVA; (1) +6.2% and (1) -6.2% at 750 kVA; (1) +6.4% and (1) -6.4% at 1000 kVA. With 575 V primary, symmetrical 5% taps apply thru 750 kVA; at 1000 kVA, (1) +5.1% and (1) -5.1%. For ratings less than 15 kV contact ABB Sales Office.

Totally enclosed, nonventilated (TENV)

Product overview



TENV Transformer

Totally enclosed nonventilated (TENV) transformers are an excellent choice for applications where dry-type transformer benefits are desired but the standard enclosure openings are unacceptable because of adverse atmospheric conditions. TENV transformers are recommended where dust, dirt or lint may be present or where transformers are subject to sprays or controlled wash-down conditions. They are UL Listed through 75 kVA for indoor or protected outdoor applications. TENV are excluded from DOE 2016 regulations.

Features

- Quiet design - unique core and coil design makes ABB TENV transformers among the quietest available
- Core and coil assembly mounted on rubber isolation pads to reduce noise
- Bolted coil terminations are more reliable than welded terminations, and they eliminate weld failures and problems associated with welding and weld splatter
- 100% factory tested for shorts and coil integrity, current and loss, voltage, impedance and noise
- Qualified to the seismic requirements of IEEE-693-2005 and IBC 2021/CBC 2022
- Copper ground strap
- Copper or aluminum windings available
- Available in 150°C, 115°C, and 80°C rise models
- Indoor or outdoor use
- NEMA 3R enclosure

Totally enclosed, nonventilated (TENV)



Aluminum 150°C Rise three-phase NEMA TP-1 efficiency

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	208Y/120	15	(+2, -4: 2.5%)	370	XV372	9T85B3871
		30	(+2, -4: 2.5%)	450	XV373	9T85B3872
		45	(+2, -4: 2.5%)	670	XV374	9T85B3873
		75	(+2, -4: 2.5%)	815	XV375	9T85B3874

Aluminum 115°C Rise three-phase NEMA TP-1 efficiency

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	208Y/120	15	(+2, -4: 2.5%)	370	XV372	9T85B3871G15
		30	(+2, -4: 2.5%)	450	XV373	9T85B3872G15
		45	(+2, -4: 2.5%)	670	XV374	9T85B3873G15
		75	(+2, -4: 2.5%)	815	XV375	9T85B3874G15

Aluminum 80°C Rise three-phase NEMA TP-1 efficiency

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	208Y/120	30	(+2, -4: 2.5%)	670	XV374	9T85B3872G80

Copper 150°C Rise three-phase NEMA TP-1 efficiency

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	208Y/120	15	(+2, -4: 2.5%)	410	XV372	9T85C9871
		30	(+2, -4: 2.5%)	525	XV373	9T85C9872
		45	(+2, -4: 2.5%)	760	XV374	9T85C9873
		75	(+2, -4: 2.5%)	1000	XV375	9T85C9874

Copper 115°C Rise three-phase NEMA TP-1 efficiency

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	208Y/120	15	(+2, -4: 2.5%)	410	XV372	9T85C9871G15
		30	(+2, -4: 2.5%)	525	XV373	9T85C9872G15
		45	(+2, -4: 2.5%)	760	XV374	9T85C9873G15
		75	(+2, -4: 2.5%)	1000	XV375	9T85C9874G15

Copper 80°C Rise three-phase NEMA TP-1 efficiency

Input voltage	Output voltage	kVA	Taps	Net weight (Lbs)	Frame size	Ordering code
480	208Y/120	15	(+2, -4: 2.5%)	410	XV372	9T85C9871G80
		45	(+2, -4: 2.5%)	760	XV374	9T85C9873G80

Servicenter™ integrated transformer and distribution panels

Product overview



—
Single-Phase Servicenter™



—
Three-Phase Servicenter™

Product description

Available in single-phase, 5 through 25 kVA, and in three-phase, 15 through 30 kVA, 600 Volt class ratings, the ABB Servicenter™ is a convenient, economical way to meet your industrial and temporary power requirements. The single-phase Servicenter™ can be used wherever 480 Volt power is available and 120 or 240 Volt branch circuits are required. The three-phase Servicenter™ can be used wherever 240 Volt, 480 Volt or 600 Volt primary is available and 208Y/120 Volt secondary circuits are required.

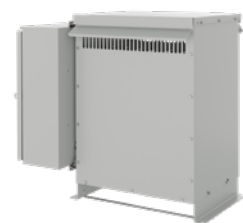
Key features

- Keyhole mounting flange facilitates easy mounting
- Indoor and outdoor use
- Front-accessible, hinged or removable panel door is safe and convenient
- Heat barrier under core and coil provides electrical and thermal isolation for wiring compartment
- High-efficiency core construction results in quiet transformer operation and low no-load losses
- Factory installed and wired ABB main and secondary main circuit breakers

Servicenter™ integrated transformer and distribution panels



Single-phase
Servicenter™



Three-phase
Servicenter™

Single-Phase Indoor/Outdoor 60 Hz 115°C Winding Temperature

Input voltage	Output voltage	kVA	Max. branch spaces 1 THQL, 1-pole	Max. branch spaces 1 THQL, 2-pole	Total 1-pole spaces	Breaker rating-primary main	Breaker rating-secondary main	Ordering code
480 Volts Delta	120/240 Volts	5	6	3	12	25A	30A	9T21S1050
		7.5	6	3	12	35A	40A	9T21S1070
		10	8	4	16	50A	50A	9T21S1100
		15	12	6	24	60A	70A	9T21S1150
		25	20	10	24	100A	150A	9T21S1250

Three-Phase² Indoor/Outdoor 60 Hz¹ 150°C DOE 2016 Efficiency Aluminum Transformer Windings

Input voltage	Output voltage	kVA	Max. branch spaces 1 THQL, 1-pole	Max. branch spaces 1 THQL, 2-pole	Total 1-pole spaces	Breaker rating-primary main	Breaker rating-secondary main	Ordering code
240 Volts Delta	208Y/120 Volts	15	12	4	12	100A	50A	9T17A0001
		30	24	8	24	100A	100A	9T17A0003
480 Volts Delta	208Y/120 Volts	15	12	4	12	40A	50A	9T17A0011
		22.5	18	6	18	70A	70A	9T17A0012
		30	24	8	24	90A	100A	9T17A0013
600 Volts Delta	208Y/120 Volts	15	12	4	12	40A	50A	9T17A0021
		30	24	8	24	40A	100A	9T17A0023

Three-Phase² Indoor/Outdoor 60 Hz¹ 150°C DOE 2016 Efficiency Copper Transformer Windings

Input voltage	Output voltage	kVA	Max. branch spaces 1 THQL, 1-pole	Max. branch spaces 1 THQL, 2-pole	Total 1-pole spaces	Breaker rating-primary main	Breaker rating-secondary main	Ordering code
240 Volts Delta	208Y/120 Volts	15	12	4	12	100A	50A	9T17C0004
		30	24	8	24	100A	100A	9T17C0006
480 Volts Delta	208Y/120 Volts	15	12	4	12	40A	50A	9T17C0014
		22.5	18	6	18	70A	70A	9T17C0015
		30	24	8	24	90A	100A	9T17C0016

¹ (3) 5% taps 1 above and 2 below rated primary volts.

² Stainless steel (Type 316) enclosures are available as an engineered made to order item.

Accessories and lugs

Single-phase and three-phase

Painted parts

Frame size	Rain shield kit	Lug kit	Ground kit	Wall mount bracket	Bottom pan
	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
DX74C	9T18Y1074G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
DX75A	9T18Y1076G06	9T18Y1076G10	9T18Y1074G11	-	-
DX75C	9T18Y1074G06	9T18Y1075G10	9T18Y1074G11	9T18Y1074G07	-
DX76A	9T18Y1077G06	9T18Y1077G10	-	-	9T18Y1077G09
DX76C	9T18Y1076G06	9T18Y1076G10	9T18Y1074G11	-	-
DX77A	9T18Y1077G06	9T18Y1077G10	-	-	9T18Y1077G09
DX77C	9T18Y1077G06	9T18Y1077G10	-	-	9T18Y1077G09
DX78A	9T18Y1077G06	9T18Y1078G10	-	-	9T18Y1078G09
DX78C	9T18Y1077G06	9T18Y1078G10	-	-	9T18Y1078G09
DX79A	9T18Y1079G06	9T18Y1079G10	-	-	9T18Y1079G09
DX79C	9T18Y1079G06	9T18Y1079G10	-	-	9T18Y1079G09
DY05A	9T18Y1074G06	9T18Y1075G10	9T18Y1074G11	9T18Y1074G07	-
DY05C	9T18Y1074G06	9T18Y1075G10	9T18Y1074G11	9T18Y1074G07	-
DY08A	9T18Y1077G06	9T18Y1078G10	-	-	9T18Y1078G09
DY17A	9T18Y1077G06	9T18Y1077G10	-	-	9T18Y1077G09
DY67A	9T18Y1067G06	9T18Y1067G10	-	-	9T18Y1067G09
DY75A	9T18Y1074G06	9T18Y1075G10	9T18Y1074G11	9T18Y1074G07	-
DY75C	9T18Y1074G06	9T18Y1075G10	9T18Y1074G11	9T18Y1074G07	-
DY76A	9T18Y1076G06	9T18Y1076G10	9T18Y1074G11	-	-
DY76C	9T18Y1076G06	9T18Y1076G10	9T18Y1074G11	-	-
DY77A	9T18Y1077G06	9T18Y1077G10	-	-	9T18Y1077G09
DY77C	9T18Y1077G06	9T18Y1077G10	-	-	9T18Y1077G09
DY78A	9T18Y1077G06	9T18Y1078G10	-	-	9T18Y1078G09
DY78C	9T18Y1077G06	9T18Y1078G10	-	-	9T18Y1078G09
DY79A	9T18Y1079G06	9T18Y1079G10	-	-	9T18Y1079G09
H371C	9T18Y4317G05	-	-	-	-
H372C	9T18Y4317G06	-	-	-	-
H373C	9T18Y4317G06	-	-	-	-
H374C	9T18Y4317G06	-	-	-	-
H375C	9T18Y4322G88	-	-	-	9T18Y4504G79
H376C	9T18Y4322G88	-	-	-	9T18Y4504G79
UX02C	9T18Y1072G06	9T18Y1072G10	9T18Y1071G11	9T18Y1071G07	-
UX71A	9T18Y1071G06	9T18Y1071G10	9T18Y1071G11	9T18Y1071G07	-
UX71C	9T18Y1071G06	9T18Y1071G10	9T18Y1071G11	9T18Y1071G07	-
UX72A	9T18Y1072G06	9T18Y1072G10	9T18Y1071G11	9T18Y1071G07	-
UX72C	9T18Y1072G06	9T18Y1072G10	9T18Y1071G11	9T18Y1071G07	-
UX73A	9T18Y1072G06	9T18Y1072G10	9T18Y1071G11	9T18Y1071G07	-
UX73C	9T18Y1072G06	9T18Y1072G10	9T18Y1071G11	9T18Y1071G07	-
UX74A	9T18Y1074G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
UX74C	9T18Y1074G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
UY03A	9T18Y1072G06	9T18Y1072G10	9T18Y1071G11	9T18Y1071G07	-
UY14A	9T18Y1074G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
UY14C	9T18Y1074G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
UY72A	9T18Y1072G06	9T18Y1072G10	9T18Y1071G11	9T18Y1071G07	-
UY74A	9T18Y1074G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
UY74C	9T18Y1074G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
XV173	9T18Y1074G06	9T18Y7241G03	-	-	-
XV371	9T18Y4317G11	9T18Y7327	-	-	-
XV372	9T18Y4317G05	9T18Y7240	-	-	-
XV373	9T18Y4317G05	9T18Y7240	-	-	-
XV374	9T18Y4317G06	9T18Y7241	-	-	-
XV375	9T18Y4317G06	9T18Y7242	-	-	-
XV376	9T18Y4317G07	9T18Y7242G03	-	-	-
XV377	9T18Y4322G88	9T18Y7242G02	-	-	9T18Y4504G79
YF378	9T18Y4322G88	-	-	-	9T18Y4504G79
YX171	9T18Y1072G06	9T18Y7240G02	-	9T18Y1071G07	-
YX172	9T18Y1074G06	9T18Y7240G02	-	9T18Y1074G07	-
YX174	9T18Y1074G06	9T18Y7241G03	-	9T18Y1074G07	-
YX175	9T18Y4322G77	9T18Y7240G03	-	-	9T18Y4504G77



Accessories and lugs

Single-phase and three-phase

Stainless steel parts

	Rain shield kit	Lug kit	Ground kit	Wall mount bracket	Bottom pan
Frame size	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
DX74C	9T18Y1174G06	9T18Y1074G10	9T18Y1074G11	-	-
DX75A	9T18Y1176G06	9T18Y1076G10	9T18Y1074G11	-	-
DX75C	9T18Y1174G06	9T18Y1075G10	9T18Y1074G11	9T18Y1074G07	-
DX76C	9T18Y1176G06	9T18Y1076G10	9T18Y1074G11	-	-
DY05C	9T18Y1174G06	9T18Y1075G10	9T18Y1074G11	-	-
DY75A	9T18Y1174G06	9T18Y1075G10	9T18Y1074G11	-	-
DY75C	9T18Y1174G06	9T18Y1075G10	9T18Y1074G11	-	-
DY76A	9T18Y1176G06	9T18Y1076G10	9T18Y1074G11	-	-
DY76C	9T18Y1176G06	9T18Y1076G10	9T18Y1074G11	-	-
UX71A	9T18Y1171G06	9T18Y1071G10	9T18Y1071G11	-	-
UX71C	9T18Y1171G06	9T18Y1071G10	9T18Y1071G11	-	-
UX72A	9T18Y1172G06	9T18Y1072G10	9T18Y1071G11	9T18Y1071G07	-
UX72C	9T18Y1172G06	9T18Y1072G10	9T18Y1071G11	-	-
UX73A	9T18Y1172G06	9T18Y1072G10	9T18Y1071G11	-	-
UX73C	9T18Y1172G06	9T18Y1072G10	9T18Y1071G11	-	-
UX74A	9T18Y1174G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
UX74C	9T18Y1174G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
UY14A	9T18Y1174G06	9T18Y1074G10	9T18Y1074G11	-	-
UY14C	9T18Y1174G06	9T18Y1074G10	9T18Y1074G11	-	-
UY72A	9T18Y1172G06	9T18Y1072G10	9T18Y1071G11	-	-
UY74A	9T18Y1174G06	9T18Y1074G10	9T18Y1074G11	9T18Y1074G07	-
UY74C	9T18Y1174G06	9T18Y1074G10	9T18Y1074G11	-	-

Lug kit details

Single-phase and three-phase

Lug connector kits are readily available and can be ordered through the sales office, through the distributor, or can be purchased commercially. Lug kit and ground bar kits are included in most units up through 150 kVA.

							Specified lug kit						
Frame size	Bus bar holes		Kit number	Lug size #1 (primary)			Lug size #2 (secondary)			Lug size #3 (X0)			Notes
	Primary (available hole) and size	Secondary (available hole) and size		Qty	Conductor size ¹	Stud hole size ² (in.)	Qty	Conductor size ¹	Stud hole size ² (in.)	Qty	Conductor size ¹	Stud hole size ² (in.)	
DX75A	(1) .563 dia	(2) .563 dia	9T18Y1075G10	3	6 awg to 350 mcm	3/8	3	3 awg to 350 mcm	3/8	1	3 awg to 350 mcm	3/8	
DX76A	(4) .563 dia	(4) .563 dia	9T18Y1077G10	6	6 awg to 350 mcm	3/8	6	4 awg to 500 mcm	3/8	2	4 awg to 500 mcm	3/8	
DX77A	(4) .563 dia	(4) .563 dia	9T18Y1077G10	6	6 awg to 350 mcm	3/8	6	4 awg to 500 mcm	3/8	2	4 awg to 500 mcm	3/8	
DX78A	(4) .563 dia	(4) .563 dia	9T18Y1078G10	6	6 awg to 350 mcm	3/8	6	2 awg to 600 mcm	3/8	2	4 awg to 500 mcm	3/8	
DX79A	(4) .563 dia	(6) .563 dia	9T18Y1079G10	9	6 awg to 350 mcm	3/8	18	4 awg to 500 mcm	3/8	8	4 awg to 500 mcm	3/8	
DY05C	(1) .563 dia	(2) .563 dia	9T18Y1075G10	3	6 awg to 350 mcm	3/8	3	3 awg to 350 mcm	3/8	1	3 awg to 350 mcm	3/8	
DY17A	(4) .563 dia	(4) .563 dia	9T18Y1077G10	6	6 awg to 350 mcm	3/8	6	4 awg to 500 mcm	3/8	2	4 awg to 500 mcm	3/8	
DY67A	(6) .563 dia	(6) .563 dia	9T18Y1067G10	12	4 awg to 500 mcm	3/8	33	4 awg to 500 mcm	3/8	11	4 awg to 500 mcm	3/8	
DY75A or C	(1) .563 dia	(2) .563 dia	9T18Y1075G10	3	6 awg to 350 mcm	3/8	3	3 awg to 350 mcm	3/8	1	3 awg to 350 mcm	3/8	
DY76A or C	(1) .563 dia	(2) .563 dia	9T18Y1076G10	3	6 awg to 350 mcm	3/8	3	4 awg to 500 mcm	3/8	1	4 awg to 500 mcm	3/8	
DY77A or C	(4) .563 dia	(4) .563 dia	9T18Y1077G10	6	6 awg to 350 mcm	3/8	6	4 awg to 500 mcm	3/8	2	4 awg to 500 mcm	3/8	
DY78A or C	(4) .563 dia	(4) .563 dia	9T18Y1078G10	6	6 awg to 350 mcm	3/8	6	2 awg to 600 mcm	3/8	2	4 awg to 500 mcm	3/8	
DY79A	(4) .563 dia	(6) .563 dia	9T18Y1079G10	9	6 awg to 350 mcm	3/8	18	4 awg to 500 mcm	3/8	8	4 awg to 500 mcm	3/8	
UX02C	(1) .406 dia	(1) .406 dia	9T18Y1072G10	3	6 awg to 250 mcm	5/16	3	6 awg to 250 mcm	5/16	1	6 awg to 250 mcm	5/16	1
UX71A or C	(1) .406 dia	(1) .406 dia	9T18Y1071G10	3	14 awg to 1/0 awg	1/4	3	14 awg to 1/0 awg	1/4	1	14 awg to 1/0 awg	1/4	1
UX72A or C	(1) .406 dia	(1) .406 dia	9T18Y1072G10	3	6 awg to 250 mcm	5/16	3	6 awg to 250 mcm	5/16	1	6 awg to 250 mcm	5/16	1
UX73A or C	(1) .406 dia	(1) .406 dia	9T18Y1072G10	3	6 awg to 250 mcm	5/16	3	6 awg to 250 mcm	5/16	1	6 awg to 250 mcm	5/16	1
UX74A or C	(2) .406 dia	(2) .406 dia	9T18Y1074G10	3	6 awg to 250 mcm	5/16	6	6 awg to 350 mcm	3/8	2	6 awg to 250 mcm	5/16	
UY03A	(1) .406 dia	(1) .406 dia	9T18Y1072G10	3	6 awg to 250 mcm	5/16	3	6 awg to 250 mcm	5/16	1	6 awg to 250 mcm	5/16	1
UY14A or C	(2) .406 dia	(2) .406 dia	9T18Y1074G10	3	6 awg to 250 mcm	5/16	6	6 awg to 350 mcm	3/8	2	6 awg to 250 mcm	5/16	
UY72A	(1) .406 dia	(1) .406 dia	9T18Y1072G10	3	6 awg to 250 mcm	5/16	3	6 awg to 250 mcm	5/16	1	6 awg to 250 mcm	5/16	1
UY74A or C	(2) .406 dia	(2) .406 dia	9T18Y1074G10	3	6 awg to 250 mcm	5/16	6	6 awg to 350 mcm	3/8	2	6 awg to 250 mcm	5/16	
XV371	(1) .406 dia	(1) .406 dia	9T18Y7327	3	14 awg to 1/0 awg	1/4	3	14 awg to 1/0 awg	1/4	1	14 awg to 1/0 awg	1/4	1
XV372	(1) .406 dia	(1) .406 dia	9T18Y7240	3	6 awg to 250 mcm	5/16	3	6 awg to 250 mcm	5/16	1	6 awg to 250 mcm	5/16	1
XV373	(1) .406 dia	(1) .406 dia	9T18Y7240	3	6 awg to 250 mcm	5/16	3	6 awg to 250 mcm	5/16	1	6 awg to 250 mcm	5/16	1
XV374	(2) .406 dia	(2) .406 dia	9T18Y7241	3	6 awg to 250 mcm	5/16	6	6 awg to 350 mcm	3/8	2	6 awg to 350 mcm	3/8	
XV375	(1) .563 dia	(2) .563 dia	9T18Y7243	3	6 awg to 350 mcm	3/8	3	2 awg to 600 mcm	3/8	1	2 awg to 600 mcm	3/8	
XV376	(1) .563 dia	(2) .563 dia	9T18Y7242G03	3	6 awg to 350 mcm	3/8	6	4 awg to 500 mcm	3/8	2	4 awg to 500 mcm	3/8	
XV377	(2) .563 dia	(4) .563 dia	9T18Y7242G02	6	6 awg to 350 mcm	3/8	12	6 awg to 350 mcm	3/8	4	6 awg to 350 mcm	3/8	

¹ Recommended maximum cable range

² Screws: 1/4" = 1" long, 5/16 and 3/8 = 1 1/2" long

Note Number 1: Proximity of bus bars would prohibit dual lugs per bus bar

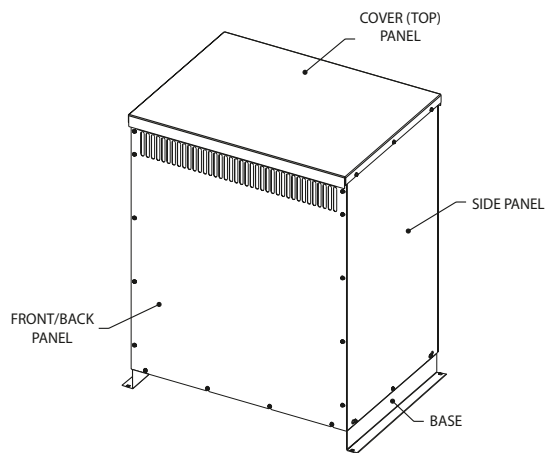
Enclosure parts

Frame size	Enclosure kits	Front/back panel	Side panel	Cover (top)
	Ordering code	Ordering code	Ordering code	Ordering code
DX74C	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
DX75A	9T18Y1076G01	9T18Y1076G03	9T18Y1076G04	9T18Y1076G05
DX75C	9T18Y1075G01	9T18Y1075G03	9T18Y1075G04	9T18Y1074G05
DX76A	9T18Y1077G01	9T18Y1077G03	9T18Y1077G04	9T18Y1077G05
DX76C	9T18Y1076G01	9T18Y1076G03	9T18Y1076G04	9T18Y1076G05
DX77A	9T18Y1077G01	9T18Y1077G03	9T18Y1077G04	9T18Y1077G05
DX77C	9T18Y1077G01	9T18Y1077G03	9T18Y1077G04	9T18Y1077G05
DX78A	9T18Y1078G01	9T18Y1078G03	9T18Y1078G04	9T18Y1078G05
DX78C	9T18Y1078G01	9T18Y1078G03	9T18Y1078G04	9T18Y1078G05
DX79A	9T18Y1079G01	9T18Y1079G03	9T18Y1079G04	9T18Y1079G05
DX79C	9T18Y1079G01	9T18Y1079G03	9T18Y1079G04	9T18Y1079G05
DY05A	9T18Y1075G01	9T18Y1075G03	9T18Y1075G04	9T18Y1074G05
DY05C	9T18Y1075G01	9T18Y1075G03	9T18Y1075G04	9T18Y1074G05
DY08A	9T18Y1078G01	9T18Y1078G03	9T18Y1078G04	9T18Y1078G05
DY17A	9T18Y1077G01	9T18Y1077G03	9T18Y1077G04	9T18Y1077G05
DY67A	-	9T18Y1067G03	9T18Y1067G04	9T18Y1067G05
DY75A	9T18Y1075G01	9T18Y1075G03	9T18Y1075G04	9T18Y1074G05
DY75C	9T18Y1075G01	9T18Y1075G03	9T18Y1075G04	9T18Y1074G05
DY76A	9T18Y1076G01	9T18Y1076G03	9T18Y1076G04	9T18Y1076G05
DY76C	9T18Y1076G01	9T18Y1076G03	9T18Y1076G04	9T18Y1076G05
DY77A	9T18Y1077G01	9T18Y1077G03	9T18Y1077G04	9T18Y1077G05
DY77C	9T18Y1077G01	9T18Y1077G03	9T18Y1077G04	9T18Y1077G05
DY78A	9T18Y1078G01	9T18Y1078G03	9T18Y1078G04	9T18Y1078G05
DY78C	9T18Y1078G01	9T18Y1078G03	9T18Y1078G04	9T18Y1078G05
DY79A	9T18Y1079G01	9T18Y1079G03	9T18Y1079G04	9T18Y1079G05
H371C	9T18Y4412G01	9T18Y4412G03	9T18Y4412G04	9T18Y4412G05
H372C	9T18Y4413G01	9T18Y4413G03	9T18Y4413G04	9T18Y4413G05
H373C	9T18Y4413G01	9T18Y4413G03	9T18Y4413G04	9T18Y4413G05
H374C	9T18Y4414G01	9T18Y4414G03	9T18Y4414G04	9T18Y4413G05
H375C	9T18Y4506G79	9T18Y4502G79	9T18Y4505G79	9T18Y4501G79
H376C	9T18Y4506G79	9T18Y4502G79	9T18Y4505G79	9T18Y4501G79
UX02C	9T18Y1072G01	9T18Y1072G03	9T18Y1072G04	9T18Y1072G05
UX71A	9T18Y1071G01	9T18Y1071G03	9T18Y1071G04	9T18Y1071G05
UX71C	9T18Y1071G01	9T18Y1071G03	9T18Y1071G04	9T18Y1071G05
UX72A	9T18Y1072G01	9T18Y1072G03	9T18Y1072G04	9T18Y1072G05
UX72C	9T18Y1072G01	9T18Y1072G03	9T18Y1072G04	9T18Y1072G05
UX73A	9T18Y1072G01	9T18Y1072G03	9T18Y1072G04	9T18Y1072G05
UX73C	-	9T18Y1072G03	9T18Y1072G04	9T18Y1072G05
UX74A	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
UX74C	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
UY03A	9T18Y1072G01	9T18Y1072G03	9T18Y1072G04	9T18Y1072G05
UY14A	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
UY14C	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
UY72A	9T18Y1072G01	9T18Y1072G03	9T18Y1072G04	9T18Y1072G05
UY74A	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
UY74C	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
XV173	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
XV371	9T18Y4421G01	9T18Y4421G03	9T18Y4421G04	9T18Y4421G05
XV372	9T18Y4412G01	9T18Y4412G03	9T18Y4412G04	9T18Y4412G05
XV373	9T18Y4412G01	9T18Y4412G03	9T18Y4412G04	9T18Y4412G05
XV374	9T18Y4413G01	9T18Y4413G03	9T18Y4413G04	9T18Y4413G05
XV375	9T18Y4414G01	9T18Y4414G03	9T18Y4414G04	9T18Y4413G05
XV376	9T18Y4415G01	9T18Y4415G03	9T18Y4415G04	9T18Y4415G06
XV377	9T18Y4506G79	9T18Y4502G79	9T18Y4505G79	9T18Y4501G79
YF378	9T18Y4506G88	9T18Y4502G88	9T18Y4505G88	9T18Y4501G79
YX171	9T18Y1072G01	9T18Y1072G03	9T18Y1072G04	9T18Y1072G05
YX172	9T18Y1074G01	9T18Y1074G03	9T18Y1074G04	9T18Y1074G05
YX174	9T18Y1075G01	9T18Y1075G03	9T18Y1075G04	9T18Y1074G05
YX175	9T18Y4506G77	9T18Y4502G77	9T18Y4505G77	9T18Y4501G77

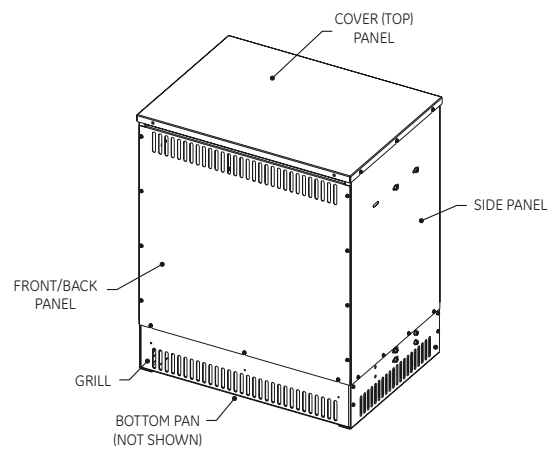
Enclosure parts

Totally enclosed non-ventilated

	Enclosure kits	Front/back panel	Side panel	Cover (top)
Frame size	Ordering code	Ordering code	Ordering code	Ordering code
XV372	9T18Y4772G01	9T18Y4772G03	9T18Y4412G04	9T18Y4412G05
XV373	9T18Y4772G01	9T18Y4772G03	9T18Y4412G04	9T18Y4412G05
XV374	9T18Y4774G01	9T18Y4774G03	9T18Y4413G04	9T18Y4413G05
XV375	9T18Y4775G01	9T18Y4775G03	9T18Y4414G04	9T18Y4413G05



ENCLOSURE KIT: 1 COVER + 2 SIDES + 2 FRONTS



ENCLOSURE KIT: 1 COVER + 2 SIDES + 2 FRONTS

This style enclosure is used with the following frames:

Frame size	Frame size
UX71A	UY74C
UX71C	UX74C
UX72A	DY75A
UX72C	DY75C
UX73A	DX75A
UX73C	DX75C
UY74A	DY76A
UX74A	DY76C

This style enclosure is used with the following frames:

Frame size	Frame size
DX76A	DX79A
DX76C	DX79C
DX77A	YF171
DX77C	YF172
DY77A	YF173
DY77C	YF174
DY78C	YF175
DY78A	YF176
DX78A	YF177
DX78C	-

General and technical information

Small power transformers

600 volts and below

Construction – Type IP, QB and QMS

Small power transformers - Type IP

Type IP small power transformers are broken down into two categories - Machine Tool and Control Power. All are manufactured using copper windings and are UL and cUL Listed. Machine Tool transformers are used when higher inrush currents are required to drive more peak power demanding loads.

Small power transformers - Types QB and QMS

QB and QMS small power transformers come standard in NEMA 3R nonventilated weatherproof enclosures. Type QB and QMS units feature encapsulated copper core and coils with integrated junction boxes for easy wiring.

Termination

Improved termination spacing and wiring compartment room gives greater flexibility in selecting various UL listed connectors for either copper or aluminum cable.

Applicable standards

Types QB and QMS are UL and cUL Listed XPTQ.E323774 and XPTQ7.E323774.

Type IP transformers are UL and cUL listed XPTQ.E323774 and XPTQ7.E323774.



Core and coil transformer terminal with fuse block



Core and coil transformer terminal block



Type QB, .050 kVA-3 kVA, Single-phase



Type QMS, 5 kVA-25 kVA, Single-phase

Open core and coil transformers

Machine tool and control power

Product description

Core and coil transformers for machine tools are used to provide voltage to control devices in applications where regulation and minimum space are important. Welded cores provide the highest quality electrical performance and quiet operation.

Standards: Type IP transformers conform to NEMA ST20

Listings: UL listed under UL-5085, File E2739 and E323774

Insulation classes: 150VA and below: 105°C insulation class, 55°C Rise
200VA and above: 185°C (NEMA) 180°C (UL) insulation class, 115°C Rise

Voltage regulation: All designs 2.0 kVA and below are compensated for voltage drop. Compensation ranges from 10% in the smallest rating to 3% for the largest. All machine tool designs meet or exceed NMTBA regulation requirements.

Series-multiple secondary connections: Transformers with 120/240 V secondaries (series-multiple) may be connected for 120 V, 240 V or 240/120 V three-wire. Jumpers are provided.

Overcurrent protection: Type IP transformers are low impedance transformers that require overcurrent protection for most applications. They provide for optional integral primary and/or secondary fusing.

Mounting dimensions: Type IP transformers are lightweight, small, and designed for minimum mounting dimensions. Many units will fit competitors mounting footprints.



Core and coil transformer terminal with fuse block



Core and coil transformer terminal block

Advantages

- Finger-safe terminals offer added protection and safety
- Pressure plate terminals ensure secure connections
- Wide variety of fusing options. See page 10B-9.

Key features—terminal block

- Rugged, high-impact plastic terminal block
- Full head #8 brass screws assure quick, easy terminations with maximum connection integrity
- Copper windings
- Flexible design allows input or output voltage to match any application
- CUL, UL approvals
- CE approved on page 10B-12
- Available fuse-blocks offer simple, low-cost fusing

Open core and coil transformers

Machine tool applications

Single-phase, fully-encapsulated design

60 Hz Terminal block

Input voltage	Output voltage	kVA	Wiring diagram no. ¹	Approx. net weight (lbs.)	Frame size	Ordering code
220x440, 230x460, 240x480 Volts	110, 115, 120 Volts	0.05	1	2.4	6100	9T58K0042
		0.08	1	2.8	6125	9T58K0043
		0.10	1	3.6	8100	9T58K0044
		0.15	1	5.1	8150	9T58K0045
		0.20	1	5.8	8175	9T58K0046
		0.25	1	6.5	8200	9T58K0047
		0.30	1	7.6	8250	9T58K0048
		0.38	1	7.6	8250	9T58K0049
		0.50	1	10.7	10225	9T58K0050
		0.75	1	12	12225	9T58K0051
		1	1	16.1	12300	9T58K0052
		2	1	26.7	14225	9T58K0053
		2	1	32.7	14300	9T58K0054
		3	1	47.4	14475	9T58K0055

50/60 Hz Terminal block

Input voltage	Output voltage	kVA	Wiring diagram no. ¹	Approx. net weight (lbs.)	Frame size	Ordering code
230/460/575 Volts	115/95 Volts	0.05	2	3.1	6150	9T58K0062
		0.08	2	3.6	8100	9T58K0063
		0.10	2	5.1	8150	9T58K0064
		0.15	2	6.5	8200	9T58K0065
		0.20	2	6.5	8200	9T58K0066
		0.25	2	7.6	8250	9T58K0067
		0.30	2	10.7	10225	9T58K0068
		0.38	2	10.7	10225	9T58K0069
		0.50	2	10.7	10225	9T58K0070
		0.75	2	16.1	12300	9T58K0071
		1	2	26.7	14225	9T58K0072
		1.5	2	32.7	14300	9T58K0073
		2	2	47.4	14475	9T58K0074
208/277/380 Volts	115/95 Volts	0.05	3	3.1	6150	9T58K0082
		0.08	3	3.6	8100	9T58K0083
		0.10	3	5.1	8150	9T58K0084
		0.15	3	6.5	8200	9T58K0085
		0.20	3	6.5	8200	9T58K0086
		0.25	3	7.6	8250	9T58K0087
		0.30	3	10.7	10225	9T58K0088
		0.38	3	10.7	10225	9T58K0089
		0.50	3	10.7	10225	9T58K0090
		0.75	3	16.1	12300	9T58K0091
		1	3	26.7	14225	9T58K0092
		1.5	3	32.7	14300	9T58K0093
		2	3	47.4	14475	9T58K0094

¹ See page 10B-10 for wiring diagrams.

50/60 Hz Terminal block connection

Input voltage	Output voltage	kVA	Wiring diagram no.	Approx. net weight (lbs.)	Frame size	Ordering code
230/400/460/575 Volts	115/95/125 Volts	0.25	9	12	10225	9T58K3715
		0.35	9	12	10225	9T58K3716
		0.5	9	16	12225	9T58K3717
		0.75	9	19	12300	9T58K3718
		1	9	28	14225	9T58K3719
		1.5	9	34	14300	9T58K3720
		2	9	34	14475	9T58K3721

Factory- or field-installed options

Secondary fusing—Factory- or field-installed secondary fuse clips are available. They are restricted to units with terminal strips and a single secondary voltage or secondary with one tap.

Dual primary and secondary fusing—Factory- or field-installed dual primary and secondary fuse clips are available on all units.

Open core and coil transformers

Control power

Single-phase, fully-encapsulated design

60 Hz Terminal block

Input voltage	Output voltage	kVA	Wiring diagram no. ¹	Approx. net weight (lbs.)	Frame size	Ordering code
240x480 Volts	120/240 Volts	0.05	4	2.4	6100	9T58K2802
		0.08	4	2.8	6125	9T58K2803
		0.10	4	3.6	8100	9T58K2804
		0.15	4	5.1	8150	9T58K2805
		0.20	4	5.8	8175	9T58K2806
		0.25	4	6.5	8200	9T58K2807
		0.30	4	6.5	8200	9T58K2808
		0.38	4	7.6	8250	9T58K2809
		0.50	4	10.7	10225	9T58K2810
		0.75	4	12	12225	9T58K2811
		1	4	16.1	12300	9T58K2812
		1.5	4	26.7	14225	9T58K2813
		2	4	32.7	14300	9T58K2814
		3	4	47.4	14475	9T58K2815
600 Volts	120/240 Volts	0.08	5	2.8	6125	9T58K2823
		0.10	5	3.6	8100	9T58K2824
		0.20	5	5.8	8175	9T58K2826
		0.25	5	6.5	8200	9T58K2827
		0.30	5	6.5	8200	9T58K2828
		0.50	5	10.7	10225	9T58K2830
		0.75	5	12	12225	9T58K2831
		1	5	16.1	12300	9T58K2832
		1.5	5	26.7	14225	9T58K2833
		2	5	32.7	14300	9T58K2834
		3	5	47.4	14475	9T58K2835
		0.10	6	3.6	8100	9T58K2907
		0.20	6	5.8	8175	9T58K2909
		0.30	6	6.5	8200	9T58K2911
120x240 Volts	120/240 Volts	0.50	6	10.7	10225	9T58K2913
		0.75	6	12	12225	9T58K2914
		1	6	16.1	12300	9T58K2915
		2	6	32.7	14300	9T58K2917
		3	6	47.4	14475	9T58K2918

60 Hz Terminal block

Input voltage	Output voltage	kVA	Wiring diagram no. ¹	Approx. net weight (lbs.)	Frame size	Ordering code
120 x 240 Volts	12/24 Volts	0.05	7	2.4	6100	9T58K2873
		0.075	7	2.8	6125	9T58K2874
		0.10	7	3.6	8100	9T58K2875
		0.15	7	5.1	8150	9T58K2876
		0.20	7	5.8	8175	9T58K2877
		0.25	7	6.5	8200	9T58K2878
		0.30	7	6.5	8200	9T58K2879
240 x 480 Volts	12/24 Volts	0.25	-	6.5	8200	9T58K3024
		0.05	-	2.4	6100	9T58K3164
		0.10	-	3.6	8100	9T58K4132
208 x 240 Volts	12/24 Volts	0.05	-	2.4	6100	9T58K4050
		0.10	-	3.6	8100	9T58K4051
		0.15	-	5.1	8150	9T58K4052
		0.25	-	6.5	8200	9T58K4053

50/60 Hz Terminal block

Input voltage	Output voltage	kVA	Wiring diagram no. ¹	Approx. net weight (lbs.)	Frame size	Ordering code
240 x 480 Volts	120/240 Volts	0.50	4	10.7	10225	9T58K2930
		0.75	4	16.1	12300	9T58K2931
		1	4	26.7	14225	9T58K2932
		1.5	4	32.7	14300	9T58K2933
		2	4	47.4	14475	9T58K2934
		3	4	47.4	14475	9T58K2935
		0.25	8	6.5	8200	9T58K2975
380/400/416 Volts	115/230 Volts	0.50	8	10.7	10225	9T58K2978
		0.75	8	16.1	12300	9T58K2979
		1	8	26.7	14225	9T58K2980
		1.5	8	32.7	14300	9T58K2981
		2	8	47.4	14475	9T58K2982
		3	8	47.4	14475	9T58K2983

¹ See page 10B-10 for wiring diagrams.

² Secondary fusing not available.

Open core and coil transformers

Control power

Single-phase, fully-encapsulated design

60 Hz Leads Out Connection²

Input Voltage	Output Voltage	kVA	Wiring Diagram No. ¹	Approx. Net Weight (Lbs.)	Frame Size	Ordering code
120x240 Volts	12/24 Volts	0.05	7	2.4	6100	9T58K1873
		0.075	7	2.8	6125	9T58K1874
		0.10	7	3.6	8100	9T58K1875
		0.15	7	5.1	8150	9T58K1876
		0.20	7	5.8	8175	9T58K1877
		0.25	7	6.5	8200	9T58K1878
		0.30	7	6.5	8200	9T58K1879
		0.50	7	10.7	10225	9T58K1881
		0.75	7	12	12225	9T58K1882
		1	7	26.7	14225	9T58K1883

60 Hz Leads Out Connection²

Input Voltage	Output Voltage	kVA	Wiring Diagram No. ¹	Approx. Net Weight (Lbs.)	Frame Size	Ordering code
240 x 480 Volts	120/240 Volts	0.05	4	2.4	6100	9T58K1802
		0.075	4	2.8	6125	9T58K1803
		0.10	4	3.6	8100	9T58K1804
		0.15	4	5.1	8150	9T58K1805
		0.20	4	5.8	8175	9T58K1806
		0.25	4	6.5	8200	9T58K1807
		0.30	4	6.5	8200	9T58K1808
		0.375	4	7.6	8250	9T58K1809
		0.50	4	10.7	10225	9T58K1810
		0.75	4	12	12225	9T58K1811
		1	4	16.1	12300	9T58K1812
		1.5	4	26.7	14225	9T58K1813
		2	4	32.7	14300	9T58K1814
600 Volts	120/240 Volts	3	4	47.4	14475	9T58K1815
		0.10	5	3.6	8100	9T58K1824
		0.20	5	5.8	8175	9T58K1826
		0.30	5	6.5	8200	9T58K1828
		0.50	5	10.7	10225	9T58K1830
		1	5	26.7	14225	9T58K1832
		2	5	32.7	14300	9T58K1834
		3	5	47.4	14475	9T58K1835

50/60 Hz Leads Out Connection²

Input Voltage	Output Voltage	kVA	Wiring Diagram No. ¹	Approx. Net Weight (Lbs.)	Frame Size	Ordering code
240 x 480 Volts	120/240 Volts	0.30	4	7.6	8250	9T58K1928
		0.50	4	10.7	10225	9T58K1930
		3	4	47.4	14475	9T58K1935
380/400/416 Volts	115/230 Volts	0.50	8	10.7	10225	9T58K1978
		0.75	8	16.1	12300	9T58K1979
		1	8	26.7	14225	9T58K1980
		1.5	8	32.7	14300	9T58K1981

¹ See page 10B-10 for wiring diagrams.

² Secondary fusing not available.

Open core and coil transformers

Options and fusing guide

Transformer fusing options

Accessory description	Ordering code
(1) Quarter-inch fuseholder	9T58K0000G24 
(1) Midget fuseholder	9T58K0000G42 
(1) H/K fuseholder	9T58K0000G10 
(2) CC fuseholder	9T58K0000G43 
(2) H/K fuseholder	9T58K0000G05 

Accessory description	Ordering code
(2) CC + (1) Quarter-inch fuseholder	9T58K0000G48 
(2) CC + (1) Midget fuseholder	9T58K0000G38 
(2) CC + (1) H/K fuseholder	9T58K0000G18 
(2) Fuse clips	9T58K0000G09 
Jumper links	9T58K0000G01

Fuse guide

Midget class CC rejection fuse

Primary voltage	Transformer continuous power rating (VA)								
	50	75	100	150	200	250	300	375	500
	Fuse rating (amperes)								
100	1.50	2.00	3.00	4.00	3.00	4.00	5.00	6.00	8.00
110	1.25	2.00	2.50	4.00	5.00	3.00	4.00	5.00	7.00
120	1.25	1.60	2.50	3.00	5.00	3.00	4.00	5.00	6.00
200	0.75	1.00	1.50	2.00	3.00	3.00	4.00	5.00	4.00
208	0.60	1.00	1.25	2.00	2.50	3.00	4.00	5.00	4.00
220	0.60	1.00	1.25	2.00	2.50	3.00	4.00	5.00	3.00
230	0.60	0.80	1.25	1.60	2.50	3.00	3.00	4.00	3.00
240	0.60	0.80	1.25	1.60	2.50	3.00	3.00	4.00	3.00
277	0.50	0.80	1.00	1.60	2.00	2.50	3.00	4.00	5.00
380	0.30	0.50	0.75	1.00	1.50	1.60	2.00	2.50	3.00
400	0.30	0.50	0.75	1.00	1.50	1.60	2.00	2.50	3.00
416	0.30	0.50	0.60	1.00	1.25	1.60	2.00	2.50	3.00
440	0.30	0.50	0.60	1.00	1.25	1.60	2.00	2.50	3.00
460	0.30	0.40	0.60	0.80	1.25	1.60	1.60	2.00	3.00
480	0.30	0.40	0.60	0.80	1.25	1.50	1.60	2.00	3.00
550	0.25	0.40	0.50	0.80	1.00	1.25	1.60	2.00	2.50
575	0.25	0.30	0.50	0.75	1.00	1.25	1.50	1.60	2.50
600	0.25	0.30	0.50	0.75	1.00	1.25	1.50	1.60	2.50

For motor control circuits fusing, refer to NEC 430-72.

Secondary fuse selection

Glass fuse

Secondary voltage	Transformer continuous power rating (VA)													
	50	75	100	150	200	250	300	375	500	750	1000	1500	2000	3000
	Fuse rating (amperes)													
12	6.00	10.00	12.00	15.00	20.00	25.00	30.00	-	-	-	-	-	-	-
24	3.00	5.00	6.00	10.00	12.00	12.00	15.00	-	25.00	-	-	-	-	-
36	2.00	3.00	4.00	6.00	8.00	10.00	12.00	-	15.00	-	-	-	-	-
48	1.50	2.50	3.00	5.00	6.00	8.00	10.00	12.00	12.00	-	-	-	-	-
95	0.80	1.25	1.60	2.50	3.00	4.00	5.00	6.00	8.00	12.00	15.00	20.00	25.00	-
110	0.75	1.00	1.50	2.00	3.00	3.00	4.00	5.00	7.00	10.00	12.00	20.00	25.00	30.00
115	0.60	1.00	1.25	2.00	2.50	3.00	4.00	5.00	7.00	10.00	12.00	20.00	20.00	30.00
120	0.60	1.00	1.25	2.00	2.50	3.00	4.00	5.00	6.00	10.00	12.00	15.00	20.00	30.00
208	0.40	0.60	0.80	1.00	1.60	2.00	2.00	3.00	4.00	6.00	8.00	12.00	15.00	20.00
220	0.30	0.50	0.75	1.00	1.50	1.60	2.00	2.50	3.00	5.00	7.00	10.00	12.00	20.00
230	0.30	0.50	0.60	1.00	1.25	1.60	2.00	2.50	3.00	5.00	7.00	10.00	12.00	20.00
240	0.30	0.50	0.60	1.00	1.25	1.60	2.00	2.50	3.00	5.00	6.00	10.00	12.00	15.00

Open core and coil transformers

CE-rated

Application

This product is designed to be incorporated into equipment manufactured for sale in the European Community. This product is in conformity with the European Standard: EN 60 742, 1995 per the provisions of the Low Voltage (LV) Directive 73/23/EEC in 1973 as amended by 93/68/EEC in 1995.

The Type "IP" CE offering utilizes all copper windings, which are encapsulated in a hardened epoxy, making the winding impervious to the elements. These designs are rated at 55° C rise with a 40° C ambient. Standard on these designs are terminal block covers. These provide added protection from current carrying terminals. These designs incorporate customer friendly connection on rugged high-impact molded terminal blocks.

Factory- or field-installed options

Available as an option are two fuse blocks that have fuse covers that provide the touch safety like the terminal blocks. These can be ordered factory-installed or as kits.

Besides being CE rated, these designs are both UL and C-UL listed.

50/60 Hz

Input voltage	Output voltage	kVA	Approx. net weight (lbs.)	Frame size	Ordering code
230/400 Volts	12/24 Volts	0.025	3	6100	9T58E0020
		0.05	4	6150	9T58E0021
		0.075	4	8100	9T58E0023
		0.1	5	8150	9T58E0024
		0.15	7	8200	9T58E0025
		0.2	12	10225	9T58E0026
		0.25	12	10225	9T58E0027
		0.3	12	10225	9T58E0028
	24/48 Volts	0.375	16	12225	9T58E0029
		0.05	4	6150	9T58E0061
		0.075	4	8100	9T58E0063
		0.1	5	8150	9T58E0064
		0.15	7	8200	9T58E0065
		0.2	12	10225	9T58E0066
		0.5	19	12300	9T58E0071
		0.75	28	14225	9T58E0073
220/380, 230/400, 240/415 Volts	110/220, 115/230, 120/240 Volts	0.025	3	6100	9T58E0150
		0.05	4	6150	9T58E0151
		0.075	4	8100	9T58E0153
		0.1	5	8150	9T58E0154
		0.15	7	8200	9T58E0155
		0.2	12	10225	9T58E0156
		0.25	12	10225	9T58E0157
		0.3	12	10225	9T58E0158
		0.375	16	12225	9T58E0159
		0.5	19	12300	9T58E0161
		0.75	28	14225	9T58E0163
		1	34	14300	9T58E0164
		1.5	45	14475	9T58E0165
		0.25	12	10225	9T58E0506
200/400/480 Volts	120 Volts	0.25	12	10225	9T58E0506
400/480 Volts	120/200 Volts	1.5	45	14475	9T58E0507
380/400/415/480/528 Volts	24/48 Volts	0.3	12	10225	9T58E2000
		0.5	6	8175	9T58E2001
200/208/220/230/240 Volts	24/48 Volts	0.3	12	10225	9T58E2002

Open core and coil transformers T&X Series

Ordering table



T6050PS1



T4100PSF1



T4150PSF1



X4045SF1

50/60 Hz, RoHS and REACH compliant

Primary voltage(s)	Secondary voltage(s)	VA	Wiring diagram	Approx. net weight (lb)	Ordering code	ABB product ID
575	24	45	D	2.6	T6045SF	1TQY200060X0004
	115	45	C	2.4	T6045S1	1TQY200060X0005
		50	C	2.4	T6050PS1	1TQY200060X0007
		75	C	3.5	T6075PS1	1TQY200060X0009
		100	C	4.2	T6100PS1	1TQY200060X0013
		150	C	5.9	T6150PS1	1TQY200060X0016
		200	C	7.5	T6200PS1	1TQY200060X0019
		250	C	9.5	T6250PS1	1TQY200060X0021
		300	C	13.1	T6300PS1	1TQY200060X0024
		350	C	9.3	T6350PS1	1TQY200060X0027
		500	C	16.7	T6500PS1	1TQY200060X0031
		750	C	28.9	T6750PS1	1TQY200060X0033
	115/24	100	H	5.5	T6100PSF1	1TQY200060X0012
		500	H	14.1	T6500PSF1/C	1TQY200060X0030
460/230/208, 480/240, 440/220/200	115/24	45	A	3.5	T4045SF1	1TQY200060X0078
		50	A	3.5	T4050PSF1	1TQY200060X0077
		75	A	4.2	T4075PSF1	1TQY200060X0071
		100	A	6.7	T4100PSF1	1TQY200060X0067
		150	A	5.9	T4150PSF1	1TQY200060X0070
		250	A	9.3	T4250PSF1	1TQY200060X0068
		300	A	14.1	T4300PSF1	1TQY200060X0072
		300	A	14.1	TC4300F1	1TQY200060X0069
575/460/230	115-95	1000	G	37	T61K1	1TQY200060X0010
		2000	G	51.6	T62K1	1TQY200060X0018
		3000	G	77.1	T63K1	1TQY200060X0023
		5000	G	136.3	T65K1	1TQY200060X0029
120/240	24	100	E	5.5	TC2100F	1TQY200060X0076
		200	E	8.9	TC2200F	1TQY200060X0074
415/400/380	110/220	100	F	5.5	TC3100P21	1TQY200060X0075
		500	F	14.9	TC350021	1TQY200060X0073
460/230/208, 480/240, 440/220/200	115	750	B	28.9	X4750PS1	1TQY200060X0064
		1000	B	37	X41K1	1TQY200060X0041
		1500	B	40.7	X41.5K1	1TQY200060X0040
		2000	B	51.6	X42K1	1TQY200060X0048
		3000	B	77.1	X43K1	1TQY200060X0055
		5000	B	114.6	X45K1	1TQY200060X0060
	115/24	45	A	3.5	X4045SF1	1TQY200060X0034
		50	A	3.5	X4050PSF1	1TQY200060X0035
		75	A	4.2	X4075PSF1	1TQY200060X0038
		100	A	6.7	X4100PSF1	1TQY200060X0042
		150	A	7.9	X4150PSF1	1TQY200060X0045
		200	A	9.5	X4200PSF1	1TQY200060X0049
		250	A	11.3	X4250PSF1	1TQY200060X0052
		300	A	14.1	X4300PSF1	1TQY200060X0056
		350	A	14.1	X4350PSF1	1TQY200060X0058
		500	A	23.1	X4500PSF1	1TQY200060X0061

Open core and coil transformers T&X Series

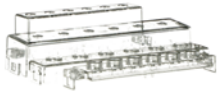
Technical data

Technical data

Ordering code	ABB product ID	Temp rise °C	Insulation system	Primary fuse holder	Secondary fuse clip	Primary fuse & quantity	Secondary fuse & quantity	Covers	UL	CSA	CUL	CE mark (IEC)
T6045SF	1TQY200060X0004	55	105	–	Yes	–	1	–	Yes	Yes	–	–
T6045S1	1TQY200060X0005	55	130	–	Yes	2	1	–	Yes	Yes	–	–
T6050PS1	1TQY200060X0007	55	105	Yes	Yes	2	1	–	Yes	–	Yes	–
T6075PS1	1TQY200060X0009	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6100PS1	1TQY200060X0013	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6150PS1	1TQY200060X0016	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6200PS1	1TQY200060X0019	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6250PS1	1TQY200060X0021	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6300PS1	1TQY200060X0024	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6350PS1	1TQY200060X0027	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6500PS1	1TQY200060X0031	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–
T6750PS1	1TQY200060X0033	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6100PSF1	1TQY200060X0012	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T6500PSF1/C	1TQY200060X0030	80	130	Yes	Yes	2	1	Yes	Yes	–	Yes	–
T4045SF1	1TQY200060X0078	55	105	–	Yes	–	1	–	Yes	Yes	–	–
T4050PSF1	1TQY200060X0077	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T4075PSF1	1TQY200060X0071	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T4100PSF1	1TQY200060X0067	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T4150PSF1	1TQY200060X0070	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T4250PSF1	1TQY200060X0068	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T4300PSF1	1TQY200060X0072	55	105	Yes	Yes	2	1	–	Yes	Yes	–	–
T61K1	1TQY200060X0010	120	180	–	–	–	–	–	Yes	Yes	–	–
T62K1	1TQY200060X0018	120	180	–	–	–	–	–	Yes	Yes	–	–
T63K1	1TQY200060X0023	120	180	–	–	–	–	–	Yes	Yes	–	–
T65K1	1TQY200060X0029	120	180	–	–	–	–	–	Yes	Yes	–	–
TC2100F	1TQY200060X0076	55	105	–	–	–	–	Yes	Yes	Yes	–	Yes
TC2200F	1TQY200060X0074	80	130	–	–	–	–	Yes	Yes	–	Yes	Yes
TC3100P21	1TQY200060X0075	55	105	Yes	–	2	–	Yes	Yes	Yes	–	Yes
TC350021	1TQY200060X0073	80	130	–	–	–	–	Yes	Yes	Yes	–	Yes
TC4300F1	1TQY200060X0069	80	130	–	–	–	–	Yes	Yes	–	Yes	Yes
X41.5K1	1TQY200060X0040	120	180	–	–	–	–	–	Yes	Yes	–	–
X41K1	1TQY200060X0041	80	130	–	Yes	–	1	–	Yes	Yes	–	–
X42K1	1TQY200060X0048	120	180	–	Yes	–	1	–	Yes	Yes	–	–
X43K1	1TQY200060X0055	120	180	–	–	–	–	–	Yes	Yes	–	–
X45K1	1TQY200060X0060	120	180	–	–	–	–	–	Yes	Yes	–	–
X4750PS1	1TQY200060X0064	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–
X4045SF1	1TQY200060X0034	55	105	–	Yes	–	1	–	Yes	–	Yes	–
X4050PSF1	1TQY200060X0035	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–
X4075PSF1	1TQY200060X0038	55	105	Yes	Yes	2	1	–	Yes	–	Yes	–
X4100PSF1	1TQY200060X0042	55	105	Yes	Yes	2	1	–	Yes	–	Yes	–
X4150PSF1	1TQY200060X0045	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–
X4200PSF1	1TQY200060X0049	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–
X4250PSF1	1TQY200060X0052	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–
X4300PSF1	1TQY200060X0056	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–
X4350PSF1	1TQY200060X0058	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–
X4500PSF1	1TQY200060X0061	80	130	Yes	Yes	2	1	–	Yes	–	Yes	–

Open core and coil transformers T&X Series

Accessories



TPTC-2002

Description	UL	Approx. product net weight (lbs.)	Ordering code	ABB product ID
Primary Fuse Kit, Class CC, 2pole	Yes	0.2	FKTP-1001	1TQY000000P0010
IP20,4-position,clear,terminal covers	Yes	0.5	TPTC-1001	1TQY000000P0011
IP20,6-position,clear,terminal covers	Yes	0.5	TPTC-2002	1TQY000000P0012
IP20 Primary Class CC Fuse Cover,2pole	Yes	0.5	TPTC-2006	1TQY000000P0013

Open core and coil transformers

Wiring diagrams

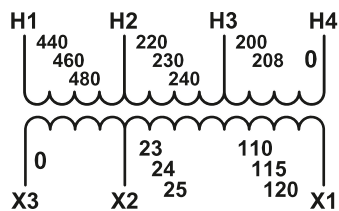


Diagram A

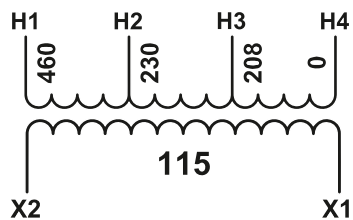


Diagram B

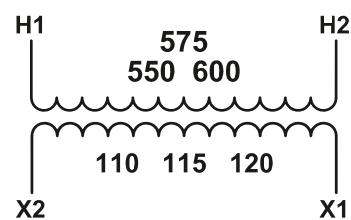


Diagram C

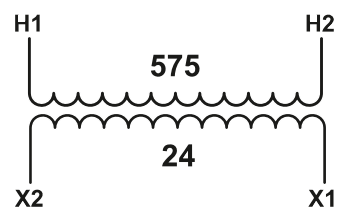


Diagram D

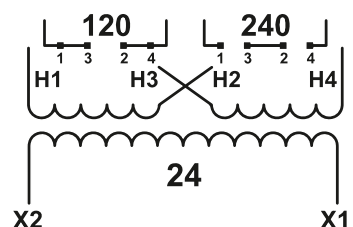


Diagram E

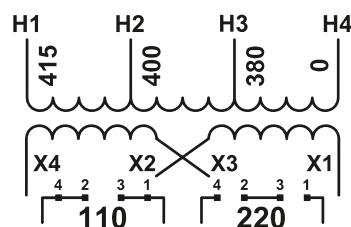


Diagram F

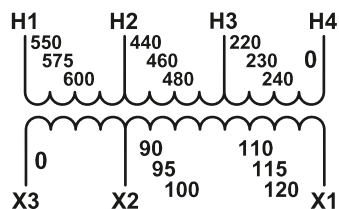


Diagram G

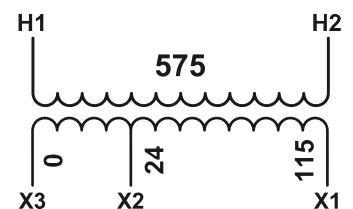
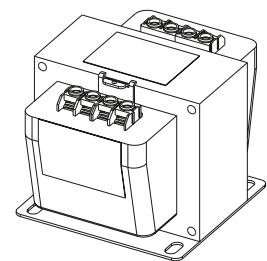
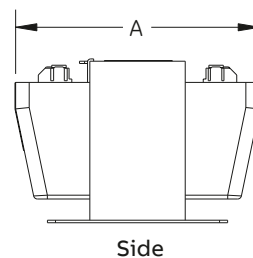
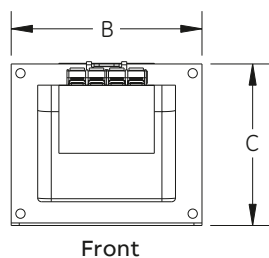
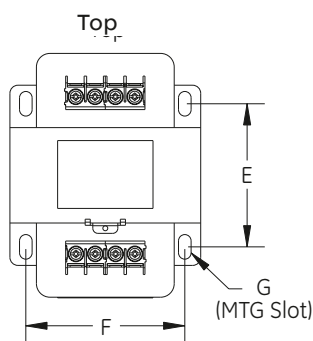


Diagram H

Open core and coil transformers T&X Series

Weights and dimensions

ABB prod. ID	Ordering code	A depth (in)	B width (in)	C height (in)	Approx. product net weight (lb.)	Approx. package net length (in)	Approx. package net width (in)	Approx. package net height (in)	Approx. package net weight (lb)
1TQY200060X0078	T4045SF1	3.9	3	3.3	3.5	7.3	5.8	4.8	4.3
1TQY200060X0077	T4050PSF1	3.9	3	4.1	3.5	7.3	5.8	4.8	4.3
1TQY200060X0071	T4075PSF1	3.5	3.4	4.4	4.2	7.3	5.8	4.8	5
1TQY200060X0067	T4100PSF1	3.9	3.8	4.7	6.7	7.3	5.8	4.8	7.5
1TQY200060X0070	T4150PSF1	4.3	3.8	4.7	5.9	7.3	5.8	4.8	6.7
1TQY200060X0068	T4250PSF1	5.1	4.5	5.3	9.3	6.8	6.5	10.3	10.1
1TQY200060X0072	T4300PSF1	6.2	5.3	6	14.1	10.3	6.5	6.8	14.9
1TQY200060X0005	T6045S1	3.4	3	3.3	2.6	7.3	5.8	4.8	3.4
1TQY200060X0004	T6045SF	3.4	3	3.3	2.6	7.3	5.8	4.8	3.4
1TQY200060X0007	T6050PS1	3.4	3	4.1	2.4	7.3	5.8	4.8	3.4
1TQY200060X0009	T6075PS1	3.9	3	4.1	3.5	7.3	5.8	4.8	4.3
1TQY200060X0013	T6100PS1	3.5	3.4	4.4	4.2	7.3	5.8	4.8	5
1TQY200060X0012	T6100PSF1	3.6	3.8	4.7	5.5	7.3	5.8	4.8	6.3
1TQY200060X0016	T6150PS1	4.3	3.8	4.7	5.9	7.3	5.8	4.8	6.7
1TQY200060X0010	T61K1	7	6.4	5.5	37	10.8	10.5	10.5	37.8
1TQY200060X0019	T6200PS1	3.9	4.5	5.3	7.5	6.8	6.5	10.3	8.3
1TQY200060X0021	T6250PS1	4.2	4.5	5.3	9.5	6.8	6.5	10.3	10.3
1TQY200060X0018	T62K1	7.6	9	7.7	51.6	10.8	10.5	10.5	52.4
1TQY200060X0024	T6300PS1	5	4.5	5.3	13.1	10.3	6.5	6.8	13.9
1TQY200060X0027	T6350PS1	5.1	4.5	5.3	9.3	10.3	6.5	6.8	10.1
1TQY200060X0023	T63K1	8.7	9	7.7	77.1	15	14.5	14.5	77.9
1TQY200060X0031	T6500PS1	6.2	5.3	6	16.7	10.3	6.5	6.8	17.5
1TQY200060X0030	T6500PSF1/C	6.2	5.3	6	14.1	10.3	6.5	6.8	14.9
1TQY200060X0029	T65K1	11.3	9	10	136.3	15	14.5	14.5	137.1
1TQY200060X0033	T6750PS1	7	5.3	6	28.9	10.3	6.5	6.8	29.7
1TQY200060X0076	TC2100F	3.6	3.8	3.5	5.5	7.3	5.8	4.8	6.3
1TQY200060X0074	TC2200F	3.9	4.5	4	8.9	6.8	6.5	10.3	9.7
1TQY200060X0075	TC3100P21	3.6	3.8	5.2	5.5	7.3	5.8	4.8	6.3
1TQY200060X0073	TC350021	5.7	5.3	4.8	14.9	10.3	6.5	6.8	15.7
1TQY200060X0069	TC4300F1	6.2	5.3	5	14.1	10.3	6.5	6.8	14.9
1TQY200060X0034	X4045SF1	3.9	3	3.3	3.5	7.3	5.8	4.8	4.3
1TQY200060X0035	X4050PSF1	3.9	3	4.1	3.5	7.3	5.8	4.8	4.3
1TQY200060X0038	X4075PSF1	3.5	3.4	4.4	4.2	7.3	5.8	4.8	5
1TQY200060X0040	X41.5K1	7.4	6.8	5.8	40.7	15	14.5	14.5	41.5
1TQY200060X0042	X4100PSF1	3.9	3.8	4.7	6.7	7.3	5.8	4.8	7.5
1TQY200060X0045	X4150PSF1	4.3	3.8	4.7	7.9	7.3	5.8	4.8	8.2
1TQY200060X0041	X41K1	7.5	6.4	5.5	37	10.8	10.5	10.5	37.8
1TQY200060X0049	X4200PSF1	4.2	4.5	5.3	9.5	6.8	6.5	10.3	10.3
1TQY200060X0052	X4250PSF1	4.6	4.5	5.3	11.3	6.8	6.5	10.3	12.1
1TQY200060X0048	X42K1	8.2	6.8	6.3	51.6	10.8	10.5	10.5	52.4
1TQY200060X0056	X4300PSF1	6.2	5.3	6	14.1	10.3	6.5	6.8	14.9
1TQY200060X0058	X4350PSF1	6.2	5.3	6	14.1	10.3	6.5	6.8	14.9
1TQY200060X0055	X43K1	8.5	9	7.5	77.1	15	14.5	14.5	77.9
1TQY200060X0061	X4500PSF1	7.2	5.3	6	23.1	10.3	6.5	6.8	23.9
1TQY200060X0060	X45K1	10.4	9	10	114.6	15	14.5	14.5	115.4
1TQY200060X0064	X4750PS1	7	5.3	6	28.9	10.3	6.5	6.8	29.7



General purpose encapsulated

Single-phase NEMA 3R

Type QB up to 3 kVA

QB small power transformers come standard in NEMA 3R non-ventilated weatherproof enclosures. These units feature encapsulated copper core and coils with integrated junction boxes for easy wiring. Improved termination spacing and wiring compartment room gives greater flexibility in selecting various UL listed connectors for either copper or aluminum cable.



Type QB, .050 kVA-3 kVA,
Single-phase

.050 - 3 kVA indoor/outdoor Type QB UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Frequency (Hz)	Taps	Wiring diagram no. ¹	Weight (lbs)	Frame size	Ordering code
240 x 480 Volts, 480 Volts	120/240 Volts	0.05	60	No Taps	1	6	6100	9T51B0002
240 x 480 Volts		0.05	50/60	No Taps	1	6	6100	9T51B0502
240 x 480 Volts, 480 Volts		0.075	60	No Taps	1	6	6200	9T51B0003
240 x 480 Volts		0.075	50/60	No Taps	1	6	6200	9T51B0503
240 x 480 Volts, 480 Volts		0.1	60	No Taps	1	6	6200	9T51B0004
240 x 480 Volts		0.1	50/60	No Taps	1	6	6200	9T51B0504
240 x 480 Volts, 480 Volts		0.15	60	No Taps	1	10	8175	9T51B0005
240 x 480 Volts		0.15	50/60	No Taps	1	10	8175	9T51B0505
240 x 480 Volts, 480 Volts		0.25	60	No Taps	1	10	8175	9T51B0007
240 x 480 Volts		0.25	50/60	No Taps	1	10	8200	9T51B0507
240 x 480 Volts, 480 Volts		0.5	60	No Taps	1	16	10200	9T51B0008
240 x 480 Volts		0.5	50/60	No Taps	1	20	10225	9T51B0508
240 x 480 Volts, 480 Volts		0.75	60	No Taps	1	25	12200	9T51B0009
240 x 480 Volts		0.75	50/60	No Taps	1	25	12225	9T51B0509
240 x 480 Volts, 480 Volts		1	60	No Taps	1	25	12225	9T51B0010
240 x 480 Volts		1	50/60	No Taps	1	30	12275	9T51B0510
240 x 480 Volts, 480 Volts		1.5	60	No Taps	1	40	14200	9T51B0011
240 x 480 Volts		1.5	50/60	No Taps	1	40	14225	9T51B0511
240 x 480 Volts, 480 Volts		2	60	No Taps	1	45	14250	9T51B0012
240 x 480 Volts		2	50/60	No Taps	1	50	14300	9T51B0512
240 x 480 Volts, 480 Volts		3	60	No Taps	1	55	14350	9T51B0013
240 x 480 Volts		3	50/60	No Taps	1	60	14400	9T51B0513
480 Volts	120/240 Volts	0.5	50/60	(-2: 5.0%)	2	20	10225	9T51B0548
		0.75	50/60	(-2: 5.0%)	2	25	12200	9T51B0549
		1	60	(-2: 5.0%)	2	25	12225	9T51B0050
		1	50/60	(-2: 5.0%)	2	30	12275	9T51B0550
		1.5	60	(-2: 5.0%)	2	40	14200	9T51B0051
		1.5	50/60	(-2: 5.0%)	2	40	14225	9T51B0551
		2	60	(-2: 5.0%)	2	45	14250	9T51B0052
		2	50/60	(-2: 5.0%)	2	50	14300	9T51B0552
		3	60	(-2: 5.0%)	2	55	14350	9T51B0053
		3	60	(+2, -2: 2.5%)	3	55	14350	9T51B0135
		3	50/60	(-2: 5.0%)	2	60	14400	9T51B0553
		0.05	60	No Taps	5	6	6100	9T51B0082
600 Volts	120/240 Volts	0.075	60	No Taps	5	6	6200	9T51B0083
		0.1	60	No Taps	5	6	6200	9T51B0084
		0.1	50/60	No Taps	5	6	6200	9T51B0584
		0.15	60	No Taps	5	10	8175	9T51B0085
		0.25	60	No Taps	5	10	8175	9T51B0087
		0.25	50/60	No Taps	5	10	8200	9T51B0587
		0.5	60	No Taps	5	16	10200	9T51B0088
		0.5	50/60	(-2: 5.0%)	2	20	10225	9T51B0568
		0.75	60	No Taps	5	25	12200	9T51B0089
		0.75	50/60	(-2: 5.0%)	2	25	12200	9T51B0569
		1	60	(-2: 5.0%)	2	25	12225	9T51B0070
		1	60	No Taps	5	25	12225	9T51B0090
		1	50/60	(-2: 5.0%)	2	30	12275	9T51B0570
		1.5	60	(-2: 5.0%)	2	40	14200	9T51B0071
		1.5	60	No Taps	5	40	14200	9T51B0091
		1.5	50/60	(-2: 5.0%)	2	40	14225	9T51B0571
		2	60	(-2: 5.0%)	2	45	14250	9T51B0072
		2	60	No Taps	5	45	14250	9T51B0092
		2	50/60	(-2: 5.0%)	2	50	14300	9T51B0572
		2	50/60	No Taps	-	50	14300	9T51B0592
		3	60	(-2: 5.0%)	2	55	14350	9T51B0073
		3	60	No Taps	5	55	14350	9T51B0093
		3	50/60	(-2: 5.0%)	2	60	14400	9T51B0573
		3	50/60	No Taps	-	60	14400	9T51B0593

¹ See page 10B-23 for wiring diagrams.

General purpose encapsulated

Single-phase NEMA 3R

Type QB up to 3 kVA

.050 - 3 kVA indoor/outdoor Type QB UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Frequency (Hz)	Taps	Wiring diagram no. ¹	Weight (lbs)	Frame size	Ordering code
120 x 240 Volts	120/240 Volts	0.05	60	No Taps	1	6	6100	9T51B0022
		0.1	60	No Taps	1	6	6200	9T51B0024
		0.25	60	No Taps	1	10	8175	9T51B0027
		0.5	60	No Taps	1	16	10200	9T51B0028
		0.75	60	No Taps	1	25	12200	9T51B0029
		1	60	No Taps	1	25	12225	9T51B0030
		1.5	60	No Taps	1	40	14200	9T51B0031
		2	60	No Taps	1	45	14250	9T51B0032
		3	60	No Taps	1	60	14400	9T51B0033
208 Volts	120/240 Volts	0.5	60	No Taps	4	16	10200	9T51B0158
		0.75	60	No Taps	4	25	12200	9T51B0159
		1	60	No Taps	4	25	12225	9T51B0160
		2	60	No Taps	4	45	14250	9T51B0156
		3	60	No Taps	4	55	14350	9T51B0157

.050 - 3 kVA indoor/outdoor Type QB UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Frequency (Hz)	Taps	Wiring diagram no. ¹	Weight (lbs)	Frame size	Ordering code
277 Volts	120/240 Volts	0.25	60	(-2: 5.1%)	2	10	8175	9T51B0187
		0.5	60	(-2: 5.1%)	2	16	10200	9T51B0188
		0.75	60	(-2: 5.1%)	2	25	12200	9T51B0189
		1	60	(-2: 5.1%)	2	30	12275	9T51B0190
		1.5	60	(-2: 5.1%)	2	40	14200	9T51B0191
		2	60	(-2: 5.1%)	2	45	14250	9T51B0192
		3	60	(-2: 5.1%)	2	55	14350	9T51B0193
380/400/416 Volts	120/240 Volts	0.15	50/60	No Taps	2	10	8175	9T51B0165
		0.25	50/60	No Taps	2	10	8200	9T51B0167
		0.5	50/60	No Taps	2	20	10225	9T51B0168
		0.75	50/60	No Taps	2	25	12200	9T51B0169
		1	50/60	No Taps	2	30	12275	9T51B0170
		1.5	50/60	No Taps	2	40	14225	9T51B0171
		2	50/60	No Taps	2	50	14300	9T51B0172
		3	50/60	No Taps	2	60	14400	9T51B0173

¹ See page 10B-23 for wiring diagrams.

Buck-Boost

Autotransformers

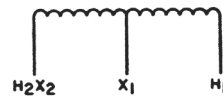
Encapsulated

Application

For general lighting and power service

Autotransformers are more economical than isolation transformers designed to carry the same load. Within their voltage limitations, they will perform the same function as transformers with the exception of isolating two circuits.

You can use these autotransformers to obtain 120 Volts from a 240 Volt circuit, to derive a neutral on a 240 Volt, two-wire circuit, or to balance a 120/240 Volt, three-wire circuit. They also may be used in banks to create polyphase circuits. See footnotes below.



Wiring diagram: single-phase



Wiring diagram: three-phase

For bucking or boosting voltage of single-phase indoor/outdoor Type QB 60 Hz UL Listed CSA Certified¹

Input voltage	Output voltage	kVA ²	Height (in)	Width (in)	Depth (in)	Approx. net weight (Lbs.)	Frame size	Ordering code
240/120 Volts	120 or 240/120 Volts (Three-Wire)	0.5	7.38	6.13	4.25	10	8175	9T51B0136
		0.75	8.38	6.88	4.88	16	10200	9T51B0137
		1	8.38	6.88	4.88	16	10200	9T51B0138
		1.5	9.63	7.88	5.5	25	12200	9T51B0139
		2	9.63	7.88	5.5	25	12225	9T51B0140
		3	11.13	9.38	6.75	40	14200	9T51B0141
		5	11.13	9.38	6.75	60	14400	9T51B0142

¹ Through 3 kVA

For bucking or boosting voltage of single-phase indoor/outdoor Type QMS 60 Hz UL Listed CSA Certified

Input voltage	Output voltage	kVA ²	Height (in)	Width (in)	Depth (in)	Approx. net weight (Lbs.)	Frame size	Ordering code
240/120 Volts	120 or 240/120 Volts (Three-Wire)	10	14.50	10.62	11.00	103	16350	9T21B4553G02
		15	17.06	10.62	11.00	147	16600	9T21B9201
		25	17.06	12.50	12.50	220	19500	9T21B9202

² kVA output at 120 Volts, two-wire, or allowable unbalance at 240/120 Volts, three-wire.

For boosting voltage of three-phase indoor/outdoor Type QB 60 Hz UL Listed

Input voltage	Output voltage	kVA ²	Height (in)	Width (in)	Depth (in)	Approx. net weight (Lbs.)	Frame size	Ordering code
208Y/120 Volts	230/133 Volts	6	7.38	6.13	4.25	10	8175	9T51B0143
		9	8.38	6.88	4.88	16	10200	9T51B0144
		15	8.38	6.88	4.88	20	10225	9T51B0145
		30	9.63	7.88	5.50	30	12275	9T51B0146
		45	11.13	9.38	6.75	40	14200	9T51B0147
		75	11.13	9.38	6.75	60	14400	9T51B0148
		6	7.38	6.13	4.25	10	8175	9T51B0150
		15	9.63	7.88	5.50	25	12200	9T51B0152
		30	11.13	9.38	6.75	40	14200	9T51B0153

³ Bank of three single-phase autotransformers to be connected wye. Dimensions and weights are for each unit in bank.

Each single autotransformer is rated 1/3 of the bank kVA rating. Order three single-phase transformers for each three-phase bank.

Buck-Boost

Buck-Boost

Isolating transformers

Encapsulated

Product description

Buck boost transformers are small, single-phase, dry type distribution transformers designed and shipped as isolating transformers. They have a dual voltage primary and a dual voltage secondary. These transformers can be connected for a wide range of voltage combinations. The most common use is to buck (lower) or boost (raise) the supply voltage a small amount. Buck boost transformers comply with NEC Article 210-9, Exception 1, when field connected as an autotransformer.

ABB bucking and boosting transformers provide an economical and convenient means for bucking or boosting voltage, usually no more than $\pm 20\%$ on single- and three-phase circuits. They are compact, relatively light in weight, and can be easily installed for indoor or outdoor service.

Buck-boost transformers are employed primarily for boosting single- and three-phase circuits by connecting them as autotransformers. When connected as an autotransformer, only the low-voltage, high-current capacity secondary windings are required to carry the load. Because this load is only transformed over a small change in voltage, the buck-boost transformer can handle loads many times its nameplate kVA rating.

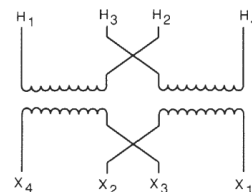
Beyond the typical bucking and boosting applications, the transformers with series-multiple 12/24, 24/48, or 16/32 Volt secondary windings are suitable for a wide variety of applications. Two or more units can be used in various combinations to obtain many other special voltages.

Advantages

- Efficient insulating materials permit compact size and light weight
- Dual voltage primary and dual voltage secondary for maximum versatility
- Large, front-accessible wiring compartment permits fast, easy wiring
- Convenient conduit knockouts located on side, bottom and back of wiring compartment
- Many ABB buck-boost transformers fit competitor mounting footprints
- Indoor or outdoor service



Indoor/outdoor Type QB transformer; single-phase



Wiring diagram for low voltage loads

Key features

- Convenient and least expensive method of matching line voltage with equipment voltage
- More efficient than equivalent isolation transformers
- Ability to handle loads up to 20 times nameplate rating when connected as an autotransformer
- Ideal for changing line voltages by small amounts
- Primary voltages include 120V, 240V and 480V
- Secondary voltages include 12V, 16V, 24V, 32V, 48V
- UL and cUL Listed
- Qualified to the seismic requirements of IEEE-693-1997 and IBC-2018

Applications

- International voltage adaptation
- Commercial and industrial air conditioning
- Heating systems
- Induction motors
- Voltage line drop correction
- Landscape lighting
- Low-voltage lighting

Efficient operation of electrical equipment requires that line voltage be at or near the nameplate rating of the equipment. In order to match available line voltage (whether it be too high or low) with equipment voltage, buck-boost transformers provide the most convenient and least expensive method.

Do not use buck-boost transformers to solve a fluctuating voltage problem. They should be used to compensate for high- or low voltage conditions only when the available line voltage is reasonably constant.

Buck-Boost

Encapsulated

For bucking and boosting voltage

Single-phase indoor/outdoor Type QB 60 Hz UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Height (in)	Width (in)	Depth (in)	Approx. net weight (Lbs.)	Frame size	Ordering code
120/240 Volts	12/24 Volts	0.05	6.38	5.12	3.25	6	6100	9T51B0102
		0.075	6.38	5.12	3.25	6	6200	9T51B0103
		0.1	6.38	5.12	3.25	6	6200	9T51B0104
		0.15	7.38	6.12	4.25	10	8175	9T51B0105
		0.25	7.38	6.12	4.25	10	8175	9T51B0107
		0.5	8.38	6.88	4.88	20	10225	9T51B0108
		0.75	9.62	7.88	5.50	25	12200	9T51B0109
		1	9.62	7.88	5.50	25	12225	9T51B0110
		1.5	11.12	9.38	6.72	40	14200	9T51B0111
		2	11.12	9.38	6.72	50	14300	9T51B0112
120/240 Volts	16/32 Volts	3	-	9.38	6.72	55	14350	9T51B0113
		0.05	6.38	5.12	3.25	6	6100	9T51B0122
		0.075	6.38	5.12	3.25	6	6200	9T51B0123
		0.1	6.38	5.12	3.25	6	6200	9T51B0124
		0.15	7.38	6.12	4.25	10	8175	9T51B0125
		0.25	7.38	6.12	4.25	10	8175	9T51B0127
		0.5	8.38	6.88	4.88	20	10225	9T51B0128
		0.75	9.62	7.88	5.50	25	12200	9T51B0129
		1	9.62	7.88	5.50	30	12300	9T51B0130
		1.5	11.12	9.38	6.72	40	14200	9T51B0131
240/480 Volts	24/48 Volts	2	11.12	9.38	6.72	50	14300	9T51B0132
		3	-	9.38	6.72	55	14350	9T51B0133
		0.05	6.38	5.12	3.25	6	6100	9T51B0202
		0.075	6.38	5.12	3.25	6	6200	9T51B0203
		0.1	6.38	5.12	3.25	6	6200	9T51B0204
		0.15	7.38	6.12	4.25	10	8175	9T51B0205
		0.25	7.38	6.12	4.25	10	8175	9T51B0207
		0.5	8.38	6.88	4.88	20	10225	9T51B0208
		0.75	9.62	7.88	5.50	25	12200	9T51B0209
		1	9.62	7.88	5.50	30	12275	9T51B0210
		1.5	11.12	9.38	6.72	40	14200	9T51B0211
		2	11.12	9.38	6.72	50	14300	9T51B0212
		3	11.12	9.38	6.72	55	14350	9T51B0213

Single-phase indoor/outdoor Type QMS 60 Hz UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Height (in)	Width (in)	Depth (in)	Approx. net weight (Lbs.)	Frame size	Ordering code
120/240 Volts	12/24 Volts	5	14.5	10.62	11	103	16350	9T21B1037G02
	16/32 Volts	5	14.5	10.62	11	115	16400	9T21B1040G02

Single-phase indoor/outdoor Type QMS 50 Hz UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Height (in)	Width (in)	Depth (in)	Approx. net weight (Lbs.)	Frame size	Ordering code
120/240 Volts	16/32 Volts	5	14.5	10.62	11	127	16450	9T21B1064G02

NOTE: In addition to bucking or boosting low circuit voltages to related value, these transformers can be used as two winding transformers to supply the rated nameplate low voltages, 12 to 48 Volts, two-wire or 12/24 to 24/48 Volts, three-wire. Also available in 50/60 Hz ratings.

Dimensions and wiring diagrams

QB transformers

Frame size	Outline drawing no.	Height (in.)	Width (in.)	Depth (in.)
6100	303B920AAP001	6.38	5.12	3.25
6150	303B920AAP001	6.38	5.12	3.25
6200	303B920AAP001	6.38	5.12	3.25
8175	303B920AAP002	7.38	6.12	4.25
8200	303B920AAP002	7.38	6.12	4.25
10200	303B920AAP003	8.38	6.88	4.88
10225	303B920AAP003	8.38	6.88	4.88
12200	303B920AAP004	9.62	7.88	5.5
12225	303B920AAP004	9.62	7.88	5.5
12275	303B920AAP004	9.62	7.88	5.5
12300	303B920AAP004	9.62	7.88	5.5
14200	303B920AAP005	11.12	9.38	6.72
14225	303B920AAP005	11.12	9.38	6.72
14250	303B920AAP005	11.12	9.38	6.72
14300	303B920AAP005	11.12	9.38	6.72
14350	303B920AAP005	11.12	9.38	6.72
14400	303B920AAP005	11.12	9.38	6.72

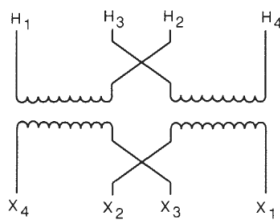


Diagram 1

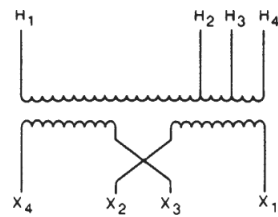


Diagram 2

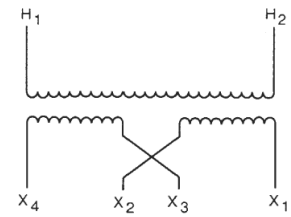
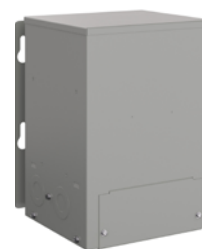


Diagram 5

General purpose encapsulated

Single-phase NEMA 3R

Type QMS have an encapsulated core & coil fully encapsulated isolation transformer in a painted NEMA 3R non-ventilated enclosure with IP 20 wiring compartment



Type QMS, 5 kVA-25 kVA,
Single-phase

5 - 25 kVA indoor/outdoor Type QMS 115°C Rise UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Frequency (Hz)	Taps	Wiring diagram no. ¹	Weight (lbs)	Frame size	Ordering code
120 x 240 Volts	120/240 Volts	5	60	No Taps	1	103	16350	9T21B1001G02
		7.5	60	No Taps	1	147	16600	9T21B1002G02
		10	60	No Taps	1	198	19400	9T21B1003G02
		10	60	No Taps	1	198	19400	9T21B1054G02
		25	60	No Taps	1	233	19550	9T21B9102
208 Volts	120/240 Volts	5	60	No Taps	4	103	16350	9T21B1028G02
		7.5	60	No Taps	4	147	16600	9T21B1029G02
		10	60	No Taps	4	198	19400	9T21B1030G02
		15	60	No Taps	4	220	19500	9T21B9119
		25	60	No Taps	4	388	50500	9T21B9120

¹ See page 10B-25 for wiring diagrams.

² For Outdoor NEMA 3R Enclosure add suffix G62 to Catalog Number.

5 - 25 kVA indoor/outdoor Type QMS 115°C Rise UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Frequency (Hz)	Taps	Wiring diagram no. ¹	Weight (lbs)	Frame size	Ordering code
277 Volts	120/240 Volts	5	60	(-2: 5.1%)	2	103	16350	9T21B1046G02
		7.5	60	(-2: 5.1%)	2	147	16600	9T21B1047G02
		10	60	(-2: 5.1%)	2	198	19400	9T21B1048G02
		10	60	(-2 2.5%)	2	198	19400	9T21B1266G02
		15	60	(-2: 5.1%)	2	220	19500	9T21B9143

¹ See page 10B-25 for wiring diagrams.

5 - 25 kVA indoor/outdoor Type QMS 115°C Rise UL Listed C-UL Listed

Input voltage	Output voltage	kVA	Frequency (Hz)	Taps	Wiring diagram no. ¹	Weight (lbs)	Frame size	Ordering code
240 x 480 Volts	120/240 Volts	5	60	No Taps	1	103	16350	9T21B1004G02
		5	50/60	No Taps	1	115	16400	9T21B1055G02
		7.5	60	No Taps	1	147	16600	9T21B1005G02
		7.5	50/60	No Taps	1	174	16600	9T21B1056G02
		10	60	No Taps	1	198	19400	9T21B1006G02
		10	50/60	No Taps	1	198	19400	9T21B1057G02
		15	60	No Taps	1	220	19500	9T21B9103
		15	50/60	No Taps	1	233	19550	9T21B9133
		25	60	No Taps	1	388	50500	9T21B9104
		25	50/60	No Taps	1	428	50600	9T21B9134
480 Volts	120/240 Volts	5	60	(-2: 5.0%)	2	103	16350	9T21B1007G02
		5	60	(+2, -2: 2.5%)	3	103	16350	9T21B1013G02
		7.5	60	(-2: 5.0%)	2	147	16600	9T21B1008G02
		7.5	60	(+2, -2: 2.5%)	3	147	16600	9T21B1014G02
		10	60	(-2: 4.9%)	2	198	19400	9T21B1009G02
		10	60	(+2, -2: 2.6%)	3	198	19400	9T21B1015G02
		15	60	(-2: 5.0%)	2	220	19500	9T21B9105
		15	60	(+2, -2: 2.5%)	3	220	19500	9T21B9109
		25	60	(-2: 5.0%)	2	388	50500	9T21B9106
		25	60	(+2, -2: 2.5%)	3	388	50500	9T21B9110
600 Volts	120/240 Volts	5	60	No Taps	5	103	16350	9T21B1016G02
		5	60	(-2: 5.0%)	2	103	16350	9T21B1019G02
		7.5	60	(-2: 5.0%)	2	147	16600	9T21B1020G02
		10	60	(-2: 4.9%)	2	198	19400	9T21B1021G02
		15	60	No Taps	5	220	19500	9T21B9111
		15	60	(-2: 4.8%)	2	220	19500	9T21B9113
		25	60	(-2: 5.0%)	2	388	50500	9T21B9114

¹ See page 10B-25 for wiring diagrams.

Dimensions and wiring diagrams

QMS transformers

Frame size	Outline drawing no.	Height (in.)	Width (in.)	Depth (in.)
16350	303B923AAP005	14.5	10.62	11
16400	303B923AAP005	14.5	10.62	11
16450	303B923AAP005	14.5	10.62	11
16600	303B923AAP007	17.06	10.62	11
19400	303B923AAP010	17.06	12.5	12.5
19450	303B923AAP010	17.06	12.5	12.5
19500	303B915AAP015	35	12.62	12.62
1619	303B922AAP001	14.50	10.75	11.12
1620	303B922AAP001	14.50	10.75	11.12
1921	303B922AAP003	17.12	12.62	12.75
1923	303B922AAP004	18.81	14.75	14.53
50500	303B915AAP025	44.75	16.75	16

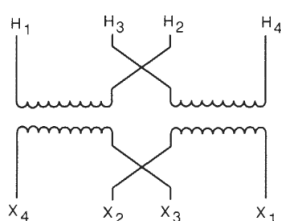


Diagram 1

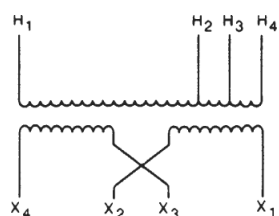


Diagram 2

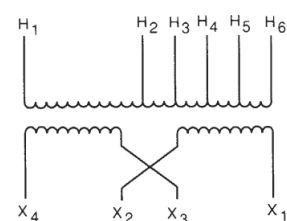


Diagram 3

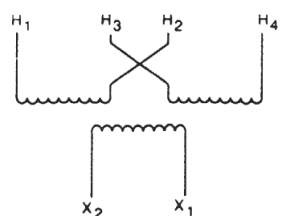


Diagram 4

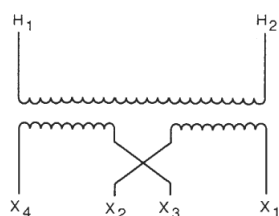


Diagram 5

