

OT160G switch-disconnectors

Savings through simple and smart design

ABB is happy to officially announce the release of its new line of switch-disconnectors 160A.



- Universal application
- Reduced stock expenses
- Easy to use and install
- Compact and powerful design

About the new switch-disconnector OT160G

Efficiency and measurable savings have been at the heart of the design process for the OT160G. We wanted to create a simple and compact device suited for all our customers' needs, that will save you both money and time across its entire lifecycle, from the moment of installation to its eventual replacement.

Recommendation to customers

Customers stocking or with ongoing project requiring switch-disconnectors should check their demand and, if necessary, advance your purchases before the OT160G_ switch replaces OT160E.

Pricing

Your local sales representative will be able to address individual requests through proper communication channels.

Active

Products in this phase are continuously in production, available and actively promoted.

Classic

Products in this phase may have price and delivery times increased. They are no longer stocked and become "make-to-order" items.

Limited

Product availability may continue. Spare parts and accessories fall under the same conditions.

Obsolete

ABB is not capable for technical or commercial reasons to guarantee the support of the products under this category. ABB's Service organization may still be able to support these products or parts of them.

About replacing the current OT160E switch-disconnectors

As of July 1st, 2016, the OT160E switch-disconnectors lines along with their accessories, will move onto Limited or Obsolete phase according to ABB's Life Cycle Management. In this phase, availability and pricing may change. The production of OT160E switch disconnectors will end by 30.6.2016. A cross reference is provided in the next pages of this document and the replacement part numbers are also indicated.

Product brochure

1SCC301018B0201

Product Web page

<http://new.abb.com/low-voltage/products/switches/>



Comparison, OT160G vs. other ABB versions

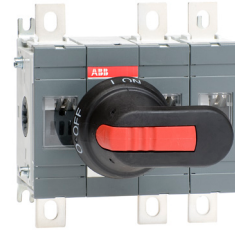
Size, weight and features



OT160G - New/available



OT160E - Moving to limited/
obsolete



OT160EV - available

Features

OT160G Switch-disconnectors	OT160G	OT160E	OT160EV
Number of poles available	3, 4	2, 3, 4	1, 2, 3, 4, 6
Modular construction	No	Yes	Yes
Viewing window	Yes	Yes	Yes
DIN rail installation	Yes	Yes	No
Installation in any orientation	Yes	Yes	Yes
Protection index with terminal shrouds	IP2X	IP2X	IP3X
Terminal shrouds	3 pole, 4 pole	1 pole, 3 pole, 4 pole	1 pole
Mounting feet	Fixed	Fixed	Adjustable
Test position	No	No	Yes
Mechanism position	Lateral	Between poles	Any
Type of terminals	Tunnel terminals (terminal clamp integrated)	Tunnel terminals (terminal clamp integrated)	External terminals, for connection with busbars.
Wide pole distance	No	No	Yes
Side-operation	Integrated	No	Yes - as a separate type
Door mounting	Separate type	Separate type	Not available

Size and volume

OT160G Switch-disconnectors	A	OT160G	OT160E	OT160EV	
3-pole	Width	mm	123	127	141
	Height		130	127	150
	Depth		60	60	70
	Foot print	cm ²	159,9	161,29	211,5
	Volume		959,4	967,74	1480,5
4-pole	Width	mm	150	154	176
	Height		130	127	150
	Depth		60	60	70
	Foot print	cm ²	195	195,58	264
	Volume		1170	1173,48	1848

Cross reference and replacement types

UL98B products

Previous/existing model	Corresponding new type
OT160E	OT160G
Base mounting.	
K=with direct mount handle, P=with external handle and shaft	
OT160E3	OT160G03
	OT160G03K
	OT160G03P
	OT160G30
	OT160G30K
	OT160G30P
OT160E4	OT160G04
	OT160G04K
	OT160G04P
	OT160G40
	OT160G40K
	OT160G40P
Door mounting.	
P=with external handle and shaft	
OT160ET4	OT160GT04
	OT160GT04P
	OT160G40
	OT160G40P
OT160ET3	OT160GT03
	OT160GT03P
	OT160GT30
	OT160GT30P

IEC products

Previous/existing model	Corresponding new type	
OT160E	OT160EV	OT160G
Base mounting.		
K=with direct mount handle, P=with external handle and shaft		
OT160E2	OT160EV02	-
	OT160EV02K	
	OT160EV02P	
-	OT160EV03	OT160G03
	OT160EV03K	OT160G03K
	OT160EV03P	OT160G03P
-	OT160EV03W	-
	OT160EV03WP	
	OT160EV04	OT160G04
-	OT160EV04K	OT160G04K
	OT160EV04P	OT160G04P
	OT160EV04W	-
-	OT160EV04W	
	OT160EV04WP	
	OT160EV04WP	
	OT160EV12	OT160G03
OT160E3	OT160EV12K	OT160G03K
	OT160EV12P	OT160G03P
	OT160EV12WP	none
OT160E4	OT160EV13	OT160G04
	OT160EV22	OT160G04
	OT160EV22K	OT160G04K
	OT160EV22P	OT160G04P
	OT160EV22WP	-
-	OT160EV33	-
	OT160EV33P	
-	OT160EVS03	OT160G03
	OT160EVS03K	OT160G03K
	OT160EVS04	OT160G04
	OT160EVS04K	OT160G04K
	OT160EVS30	OT160G30
	OT160EVS30K	OT160G30K
	OT160EVS40	OT160G40
	OT160EVS40K	OT160G40K
Door mounting.		
P=with external handle and shaft		
OT160ET2	-	none
OT160ET3	-	OT160GT03
	-	OT160GT03P
OT160ET4	-	OT160GT04
	-	OT160GT04P
OT160M3	-	OT160G03K
OT160M4	-	OT160G04K

Technical cross reference IEC

OT160G Switch-disconnectors			A	OT160G	OT160E	OT160EV
Rated insulation voltage	Pollution degree 3		V	1 000	750	1 000
Dielectric strength		50 Hz 1min.	kV	10	10	10
Rated impulse withstand voltage			kV	12	12	12
Rated thermal current in ambient 35 °C and temporarily 40 °C		In open air	A	160	200	200
		In enclosure	A	160	160	160
...with minimum cable or bar cross section		Cu	mm ²	70	70	70
Rated operational voltage AC-20 and DC-20			V	1 000	1 000	1 000
Rated operational current, AC-21A		up to 415 V	A	160	200 ¹⁾	200
		500 V	A	160	160	200
		690 V	A	160	160	160
Rated operational current, AC-22A		up to 415 V	A	160	200 ¹⁾	200
		500 V	A	160		160
		690 V	A	160	160	160
Rated operational current, AC-23A		up to 415 V	A	160	135	160
		500 V	A	160	125	160
		690 V	A	160	80	160
Rated operational power, AC-23	The kW-ratings are accurate for three-phase 1500 R.P.M. standard asynchronous motors	230 V	kW	45	45	48
		400 V	kW	75	75	80
		415 V	kW	75	75	88
		500 V	kW	90	75	112
		690 V	kW	132	75	144
Rated breaking capacity in category, AC-23		up to 500 V	A	1 280	1 000	1 280
		690 V	A	1 280	640	1 280
Rated conditional short-circuit current	at prospective SC-current	80 kA, 415 V	kA			40,5
Max. allowed cut-off current, peak value.	max. OFA_ fuse size gG / aM		A			355 / 315
The cut-off currents refer to single phase fuse tests according to fuse manufacturers declarations.		100 kA, 500 V	kA	30	30	40,5
			A	200/200	200/250	315/315
For combination starters, see coordination tables.		50 kA, 690 V	kA	24	24	35
			A	200/200	200/250	355/315
Rated short-time withstand current	R.M.S. -value I _{cw}	690 V 0,25s	kA	7	7	15
		690 V 1 s	kA	4	4	8
Rated short circuit making capacity	Peak value I _{cm}	690 V	kA	12	12	30
Rated capacitor power when no initial charge on the capacitor	Capacitor ratings limited by the fuse links	415V	kVar	65	65	80
Power loss / pole	With rated current		W	6,5	6,5	3,2
Mechanical endurance	Divide by two for operation cycles		Oper.	20 000	20 000	20 000
Weight without accessories	3-pole switch		kg	1,1	1,1	1,2
	4-pole switch		kg	1,3	1,3	1,5
Standard shaft and mounting depth	Square dimension x length of shaft		mm	6X210	6X210	6X210
	Corresponding mounting depth		mm	230-248	185-215	189-254
Standard handle			Type	OHB65J6	OHB65J6	OHB 65J6
Cu-wire size suitable for terminal			mm ²	10-70	10-70	
Terminal bolt size	Metric thread diameter x length		mm			M 8x25
Terminal tightening torque	Counter torque required		Nm	6	6	15-22
Operating torque	Typical for 3 and 4-pole switches		Nm	4	6	7
	Typical for 2-pole switches		Nm			5
	Typical for 1-pole switches		Nm			5

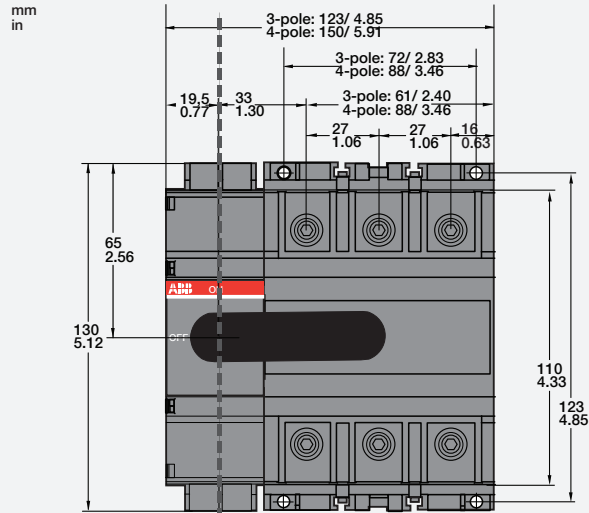
1) 95 mm² cable

Technical cross reference UL

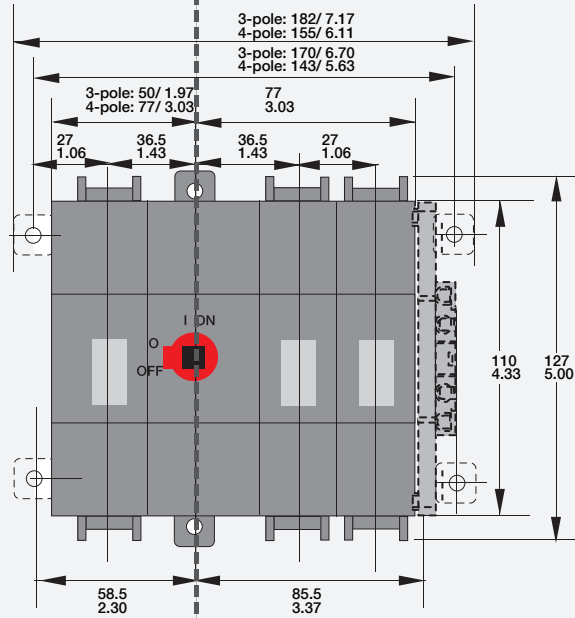
				OT160G		OT160E
				UL98 Listed	UL98 Recognized	UL98 Listed
OT160 Switch-disconnectors				100	125	100
General purpose amp rating max. operating voltage	pf=0.7...0.8	-40° to 40 °C	A	100	125	100
			V	600	600	600
Max. horsepower rating/ motor FLA current	pf=0.4...0.5	240Vac	HP/A	40/104	40/104	40/104
				Three phase	480Vac	75/96
		600Vac		100/99	100/99	
	Single phase	240Vac		20/88	20/88	
		480Vac		30/66	30/66	
		250Vdc		20/60	20/60	
Fuse size / short circuit rating	Fuse type	J	A/kA	150/100	150/100	200/100
		T		150/100	150/100	200/100
		RK5		60/100	60/100	
Endurances						
Min. electrical endurance, pf. 0.75 - 0.8		Oper. Cycles		6 000	6 000	6 000
Mechanical endurance		Operations		20 000	20 000	20 000
Terminal lug kits				Integral	Integral	Integral
Wire range	Use copper conductors only		AWG 60-75°C	8-1/0	8-1/0	8-1/0
Torque		Wire tightening	lb.in	53	53	70
Weight without accessories	3-pole switch		lb	0,5	0,5	0,5
	4-pole switch		lb	0,6	0,6	0,6
Minimum enclosure dimensions	Height x Width x Depth		mm	400 x 600 x 230	400 x 600 x 230	400 x 600 x 230

Dimensions and position of the shaft

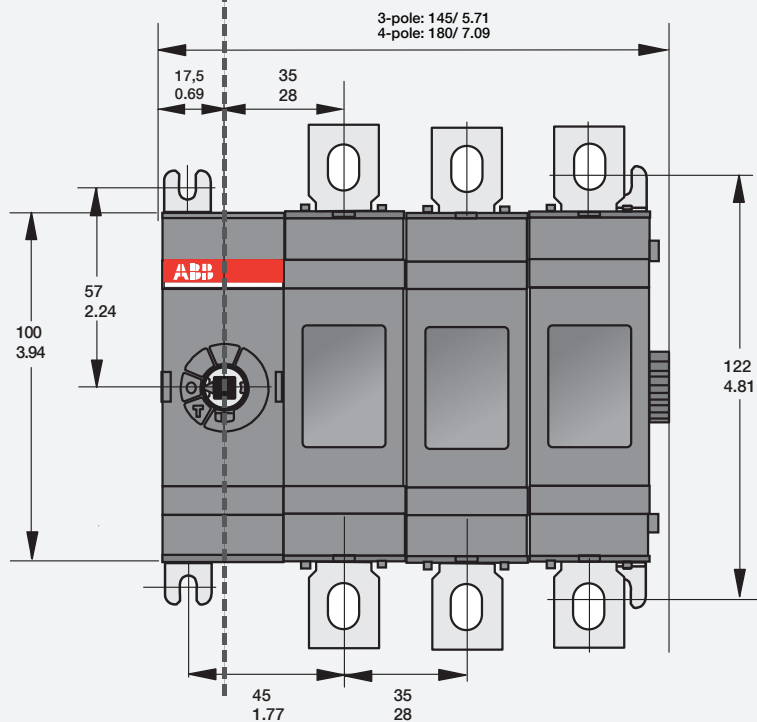
OT160G



OT160E



OT160EV



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> Low Voltage Products and Systems

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