
TECHNICAL BROCHURE

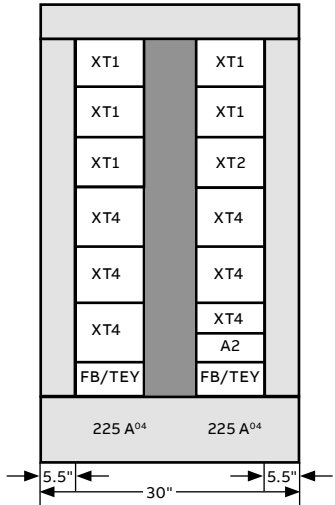
ReliaGear[®] neXT

UL 67 low-voltage distribution
power panelboards

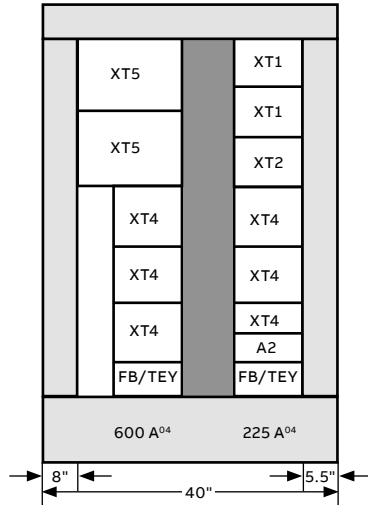


Interiors

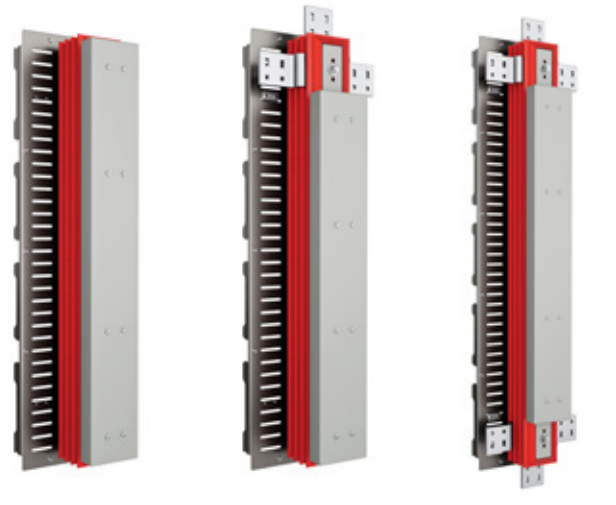
ReliaGear neXT panelboard interiors feature plug-in and bolt-on (when vertical main circuit breakers are selected) technology, IP 20 "finger-safe" features (on clean bus only) and center or offset mounting positions within the enclosure. Main lug, feed-through lug and clean bus options exist. X-height or X-space refers to the space occupied by individual (plug-in) components on the interior bus. One X-space for ReliaGear neXT equals 1.385 inches.



30" wide circuit breaker panel
Center-mounted interior



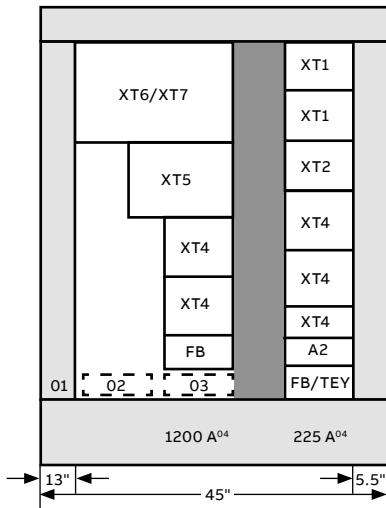
40" wide circuit breaker panel
Offset-mounted interior



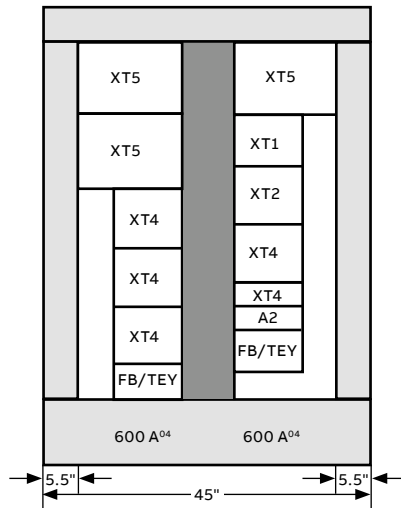
Clean bus

Main lug

Feed-through lug



45" wide circuit breaker panel
Offset-mounted interior



45" wide circuit breaker panel
Center-mounted interior

Standard interior heights

- 16X⁰⁵
- 24X⁰⁵
- 32X⁰⁵
- 40X⁰⁵

Interior materials

- Tin- and silver-plated aluminum (heat rated)
- Tin- and silver-plated copper (heat rated or 1000 A per sq. in. density rated)

01 Typical standard, hinged gutter covers

02 Typical sheet metal fillers cover the space between gutter covers and circuit breakers/blanks

03 Typical sheet metal blanks cover the future space for adding circuit breakers to the interior

04

Maximum ampacity circuit breaker allowed per this side of interior

05

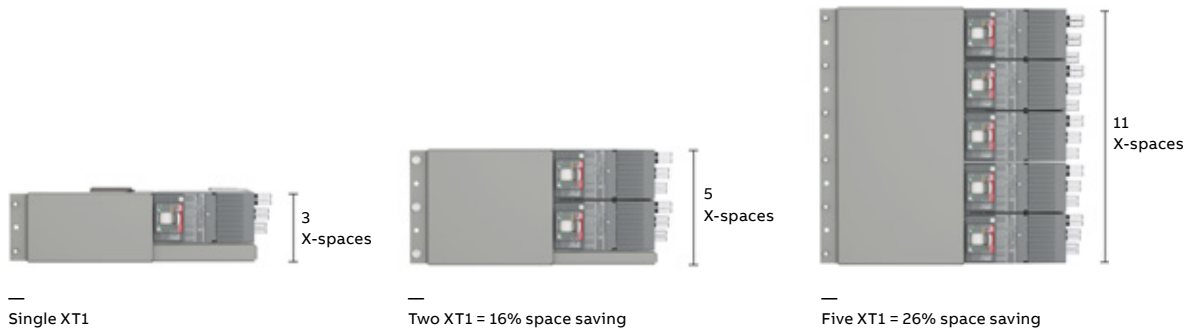
Interiors are double sided; double standard interior heights for available mounting space (Ex. 16X bus has 32X max. of circuit breaker mounting space)

X-space requirements for plug-in devices

X-space requirements for plug-in devices

See table below for the X-space requirements of plug-in components.

| Frame | Max. ampacity (A) | Poles | X-space |
|---------------|-------------------|-------|---------|
| Single XT1 | 125 | 3 | 3 |
| Two XT1 | 125 | 3 | 5 |
| Five XT1 | 125 | 3 | 11 |
| XT2 | 125 | 3 | 3 |
| XT4 | 250 | 3 | 3 |
| XT5 | 600 | 3 | 4 |
| XT6 | 800 | 3 | 6 |
| XT7 | 1200 | 3 | 6 |
| FB/TEY | 100/70 | 1 | 1 |
| FB/TEY | 100/125 | 2 | 2 |
| A2 | 250 | 2 | 2 |
| SPD | - | - | 10 |
| RELT | - | - | 3 |
| Main metering | - | - | 4 |
| Submetering | - | - | 9-14 |



XT1 circuit breaker assemblies — panelboard density and mounting hardware

The small footprint of XT1 allows this panel to offer multiple options to improve circuit breaker density. As you configure and order ReliaGear neXT panelboards, you'll notice that XT1 are grouped in quantities of one, two or five. As part of this feature, unique mounting brackets are required when adding XT1 breaker assemblies to existing installations. See below for mounting brackets and fillers.

XT1 mounting brackets

| | 30" center | 40" offset left | 40" offset right | 45" center | 45" offset left | 45" offset right |
|----------------------|------------|-----------------|------------------|------------|-----------------|------------------|
| Single XT1 | SR1XBR | SR1XBF | SR1XBR | SR1XBF | SR1XBF | SR1XBR |
| Two XT1 group mount | SR2XBR | SR2XBF | SR2XBR | SR2XBF | SR2XBF | SR2XBR |
| Five XT1 group mount | SR5XBR | SR5XBF | SR5XBR | SR5XBF | SR5XBF | SR5XBR |

X-space fillers

| Space to be filled | 30" center | 40" offset left | 40" offset right | 45" center | 45" offset left | 45" offset right |
|--------------------|------------|-----------------|------------------|------------|-----------------|------------------|
| 1X | SR01BB | SR01BF | SR01BB | SR01BF | SR01BF | SR01BB |
| 2X | SR02BB | SR02BF | SR02BB | SR02BF | SR02BF | SR02BB |
| 3X | SR03BB | SR03BF | SR03BB | SR03BF | SR03BF | SR03BB |

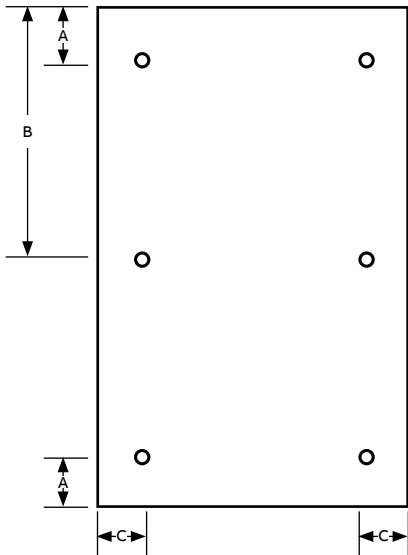
Enclosures

ReliaGear neXT panelboards come in three widths (30", 40" and 45") and four heights (60", 72", 84" and 96"). Enclosure sizing is determined by three criteria: 1) wire-bending space required for main device; 2) interior height; and 3) the largest main or branch devices selected. For additional detail, please refer to document **ReliaGear™ neXT** for NEMA 1, 2, 3R, 4, 4X and 12 enclosure dimensions.

Enclosure depths

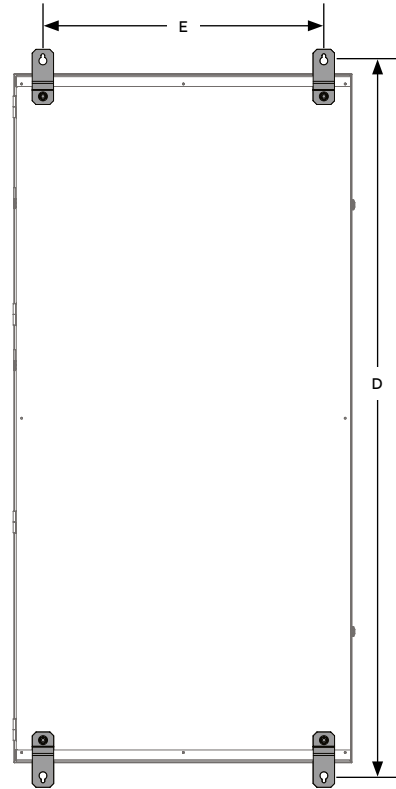
| Type | Depth | |
|-------------------------------|---------|--------------------|
| | Box | Box and front/door |
| NEMA 1 | 11" | 11" |
| NEMA 1 + DID | 11" | 14.5" |
| NEMA 2 + DID (with drip hood) | 11" | 14.5" |
| NEMA 3R | 14.5" * | 16.7" * |
| NEMA 4 / 4X / 12 | 14.8" * | 17.3" * |

*Does not include additional 0.9" depth needed for hanging brackets.



NEMA 1 and NEMA 2 mounting hole locations

| Height | Holes | A (in) | B (in) | C (in) |
|--------|-------|--------|--------|--------|
| 60" | 4 | 5 | - | 8 |
| 72" | 4 | 5 | - | 8 |
| 84" | 6 | 5 | 42 | 8 |
| 96" | 6 | 5 | 48 | 8 |



NEMA 3R, 4, 4X, 12 mounting hole locations

| Enclosure exterior size (in) | Dimension D (in) | Dimension E (in) |
|------------------------------|------------------|------------------|
| 30 (33.5) W x 60 (61.0) H | 65.97 | 24.47 |
| 30 (33.5) W x 72 (73.0) H | 77.97 | 24.47 |
| 30 (33.5) W x 84 (85.0) H | 89.97 | 24.47 |
| 30 (33.5) W x 96 (97.0) H | 101.97 | 24.47 |
| 40 (43.5) W x 60 (61.0) H | 65.97 | 34.47 |
| 40 (43.5) W x 72 (73.0) H | 77.97 | 34.47 |
| 40 (43.5) W x 84 (85.0) H | 89.97 | 34.47 |
| 40 (43.5) W x 96 (97.0) H | 101.97 | 34.47 |
| 45 (48.5) W x 60 (61.0) H | 65.97 | 39.47 |
| 45 (48.5) W x 72 (73.0) H | 77.97 | 39.47 |
| 45 (48.5) W x 84 (85.0) H | 89.97 | 39.47 |
| 45 (48.5) W x 96 (97.0) H | 101.97 | 39.47 |

Note: Values in parentheses are overall enclosure dimensions.

Connections and terminations

Panelboard connection types

This table lists X-space required for interior bus connection types. One X-space for ReliaGear neXT equals 1.385 inches. ReliaGear neXT offers main lug, vertical main breaker and horizontal main breakers. This panelboard also offers feed-through lugs and clean bus, if no feed-through is required. ReliaGear neXT interiors can be reversed in the field for feed direction.

| Maximum ampacity | Box widths | Connection to interior | X-space |
|--------------------------------|------------|---|------------|
| 250, 400, 600, 800, 1000, 1200 | 30, 40, 45 | Bolted main, single or dual mechanical lug | 4 per side |
| | | Bolted main, single or dual compression lug | |
| | | Vertical main breaker pads | |
| | | Bolted main with feed-through lug pads | 8 per side |
| | | Clean bus (horizontal main breaker) | |

Main breaker

ReliaGear neXT offers vertical and horizontal main connection types. This table list the X-space required and minimum enclosure widths per main breaker type. Vertical main breakers connect to main lug pads, which use 4X of circuit breaker mounting space along the interior bus. Vertical main circuit breakers also require a vertical main mounting kit. See catalog numbering in document 1SQC900001C0201.

| Maximum ampacity | Main breaker type | Orientation | X-space | Minimum enclosure width (interior orientation) |
|------------------|-------------------|-------------|---------|--|
| 250 | XT4 | Horizontal | 3 | 30" (center) |
| 600 | XT5 | Horizontal | 4 | 40" (offset) |
| 800 | XT6 | Horizontal | 6 | 45" (offset) |
| 1200 | XT7 | Horizontal | 6 | 45" (offset) |
| 600 | XT5 | Vertical | 4 | 30" (center) |
| 1200 | XT7 | Vertical | 4 | 30" (center) |

Standard main lug terminations (Cu/Al mechanical)

Standard mechanical lugs shown. Oversized (500–750 kcmil) mechanical lugs and compression lugs are also available. Please refer to document 1SQC900001C0201 for complete offering.

| Main amps | Lug | Wires per lug | Qty. of lugs per phase | Wire range (AWG/kcmil) |
|-----------|----------|---------------|------------------------|------------------------|
| 250 | LGML260* | 2 | 1 | #2–600 |
| 400 | LGML260* | 2 | 1 | #2–600 |
| 600 | LGML260* | 2 | 1 | #2–600 |
| 800 | LGML260* | 2 | 2 | #2–600 |
| 1000 | LGML260* | 2 | 2 | #2–600 |
| 1200 | LGML260* | 2 | 2 | #2–600 |

* A (aluminum) or C (copper) suffix lugs available.

Lug catalog number contains 1 lug. Lug quantity to be ordered to be based on number of wires and number of phases in panel. For example, in an 800 A panel, incoming Cu wires are qty. 3, 300 kcmil wires per phase. Customer to order qty. 6 LGML260C.

Standard dual main lug terminations (Cu/Al mechanical)

Standard mechanical lugs shown. Oversized (500–750 kcmil) mechanical lugs and compression lugs are also available. Please refer to document 1SQC900001C0201 for complete offering.

| Main amps | Lug | Wires per lug | Qty. of lugs per phase | Wire range (AWG/kcmil) |
|-----------|----------|---------------|------------------------|------------------------|
| 250 | LGML260* | 2 | 2 | #2–600 |
| 400 | LGML260* | 2 | 2 | #2–600 |
| 600 | LGML260* | 2 | 2 | #2–600 |
| 800 | LGMD460* | 2 | 4 | #2–600 |
| 1000 | LGMD460* | 2 | 4 | #2–600 |
| 1200 | LGMD460* | 2 | 4 | #2–600 |

* A (aluminum) or C (copper) suffix lugs available.

Lug quantity to be ordered to be based on number of wires and number of phases in panel. For example in an 800 A dual main lug panel, incoming Cu wires are qty. 3, 300 kcmil wires per phase. Customer to order qty. 3 LGMD460C.

Connections and terminations

Standard neutral lug terminations

Standard extrusions shown. Additional lugs may be added to these base extrusions when required (ground fault, vertical main, dual main, etc.)

| Lug amp rating | No. of wires | Wire size (AWG/kcmil) | Recommended tightening torque |
|----------------|--------------|---|--|
| 250/400 | 2 (main) | #2-600 (Cu/Al) | $\frac{3}{8}$ " Internal hex, 375 lb-in |
| | 5 | #6-250 (Cu) | $\frac{5}{16}$ " Internal hex, 275 lb-in |
| | | #6-300 (Al) | |
| | 16 | #14-2/0 (Cu) | $\frac{7}{16}$ " Straight slot, 50 lb-in |
| | | #12-2/0 (Al) | |
| | 24 | #8-#4 (Cu-Al) | $\frac{1}{4}$ " Straight slot, 45 lb-in |
| #12-#10 (Al) | | $\frac{1}{4}$ " Straight slot, 25 lb-in | |
| #14-#10 (Cu) | | | |
| 600/800/1200 | 8 (main) | #2-600 (Cu/Al) | $\frac{3}{8}$ " Internal hex, 375 lb-in |
| | 10 | #6-250 (Cu) | $\frac{5}{16}$ " Internal hex, 275 lb-in |
| | | #6-300 (Al) | |
| | 9 | #14-2/0 (Cu) | $\frac{7}{16}$ " Straight slot, 50 lb-in |
| | | #12-2/0 (Al) | |
| | 10 | #8-#4 (Cu-Al) | $\frac{1}{4}$ " Straight slot, 45 lb-in |
| #12-#10 (Al) | | $\frac{1}{4}$ " Straight slot, 25 lb-in | |
| #14-#10 (Cu) | | | |

Standard ground lug terminations

Grounds available in bonded or isolated, 10 or 47 wire, Al or Cu forms.

| Wire count | No. of wires | Wire size (AWG/kcmil) |
|--------------|--------------|-----------------------|
| 47 | 2 (main) | #2-600 (Cu/Al) |
| | 16 | #14-2/0 (Cu) |
| | | #12-2/0 (Al) |
| | 5 | #6-250 (Cu) |
| | | #6-300 (Al) |
| | 24 | #8-#4 (Cu-Al) |
| #12-#10 (Al) | | |
| #14-#10 (Cu) | | |
| 10 | 10 | 6-2/0 AWG |

Connections and terminations

Standard circuit breaker terminations (Cu/Al)

Standard terminations shown. ReliaGear neXT plug-in breaker assemblies are preassembled with line-side connector and load-side lugs, and main breakers are suitable for reverse-feed applications.

| Breaker frame | Ampacity (A) | Wire size (AWG or kcmil) Cu or Al | Tightening torque (lb-in) | Number of cables per lug | Circuit breaker poles | Installation | Lug catalog number |
|---------------|--------------|--------------------------------------|---------------------------|--------------------------|-----------------------|---------------------|--------------------|
| XT1 | 15-125 | #10-#8 | 40 | 1 | 3 | Horizontal | KXT1CUAL1-3PC |
| | | #6-2/0 | 80 | | | | |
| XT2 | 10-25 | #14-#8 (Cu) | 40 | 1 | 3 | Horizontal | KXT2CU-3PC |
| | | #6-1/0 (Cu) | 50 | | | | |
| | 10-125 | #10-#8 | 40 | 1 | 3 | Horizontal | KXT2CUAL2-3PC |
| | | #6-2/0 | 80 | | | | |
| XT4 | 15-70 | #14-#10 | 20.4 | 1 | 3 | Horizontal | KXT4CUAL1-3PC |
| | | #8-1/0 | 50 | | | | |
| | | 80-225 | #4-300 | | | | |
| | 250 | 3/0-350 | 200 | 1 | 3 | Horizontal | KXT4CUAL4-3PC |
| XT5 | 100-600 | 2/0-500 | 274 | 2 | 3 | Horizontal/vertical | KXT5CUAL2X500K-3PC |
| | | 500-600 | 440 | | | Horizontal/vertical | KXT5CUAL2X750KC-3 |
| | | 750** | 530 | | | | |
| XT6 | 350-800 | 2/0-4/0 | 301 | 3 | 3 | Horizontal | KXT6CUAL3X400K-3PC |
| | | 250-400 | 380 | | | | |
| | | 500-750 | 593 | | | | |
| XT7 | 250-1200 | 4/0-500 | 380 | 4 | 3 | Horizontal/vertical | KXT7CUAL4X500K-3PC |
| | | 500-750 | 593 | | | 2*/3 | 3 |
| FB | 15-20 | #14-#10 | 35 | 1 | 1, 2 | Horizontal | FCAL12 |
| FB | 25-60 | #10 | 35 | 1 | 1, 2 | Horizontal | FCAL13 |
| | | #8 | 40 | | | | |
| | | #6-#4 | 45 | | | | |
| FB | 70-100 | #4 | 45 | 1 | 1, 2 | Horizontal | FCAL14 |
| | | #3-1/0 | 50 | | | | |
| TEY | 15-20 | #14-#10 (Cu) | 35 | 1 | 1, 2 | Horizontal | *** |
| | | #12-#10 (Al) | | | | | |
| TEY | 25-60 | #10 (Cu) | 35 | 1 | 1, 2 | Horizontal | *** |
| | | #8 | 40 | 1 | | | |
| | | #6 (Cu) | 45 | 1 | | | |
| | | #6-#4 (Al) | | | | | |
| TEY | 70 | #4-#1 (Cu) | 45 | 1 | 1, 2 | Horizontal | *** |
| | | #2-1/0 (Al) | | | | | |
| | | 80-100 | #4-#1 (Cu) | | | | |
| | 125 | #3-3/0 (Cu) | 100 | 1 | | | |
| | | #1-3/0 (Al) | | | | | |
| A2 | 125-250 | #1-250 (Cu) | 135 | 1 | 2 | Horizontal | KA2225-2 |
| | | 2/0-300 (Al) | | | | | |
| A2 | 250 | 300-350 (Al) | 177 | 1 | 2 | Horizontal | KA2250-2 |

* Max. two 750 kcmil cables allowed in horizontal installation due to wire-bending space limitation.

** XT5 with 750 kcmil lugs must go in 45° offset.

*** TEY lugs are captive.

Tmax[®] XT molded case circuit breakers



Tmax XT AC ratings

| Model | Frame size (amps) | No. of poles | Rated voltage 50–60 Hz AC | Interrupt ratings (kA) | Dimensions – fixed, 3 poles W x D x H ⁽³⁾ mm (in.) | Trip units for power distribution |
|-------|-------------------|--------------|---------------------------|---|---|-----------------------------------|
| | | | | | | |
| XT1 | 125 | 3 | 480Δ ⁽¹⁾ | At 240 V AC: N = 50, S = 65, H = 100 At 480 V AC: N = 25, S = 35, H = 65 At 600Y/347 V AC: N = 18, S = 22, H = 25 | 76.2 x 70 x 130 / (3 x 2.75 x 5.12) | TMF |
| XT2 | 125 | 3 | 600 | At 240 V AC: N = 65, S = 100, H = 150, L = 200, V = 200, X = 200 At 480 V AC: N = 25, S = 35, H ⁽²⁾ = 65, L ⁽³⁾ = 100, V ⁽³⁾ = 150, X = 200 At 600 V AC: N = 18, S = 22, H ⁽²⁾ = 25, L ⁽²⁾ = 35, V ⁽²⁾ = 42, X = 42 | 90 x 83.56 x 131.1 / (3.54 x 3.29 x 5.16) | TMA, TMF, Ekip DIP, Ekip Touch |
| XT4 | 250 | 3 | 600 | At 240 V AC: N = 65, S = 100, H = 150, L = 200, V = 200, X = 200 At 480 V AC: N = 25, S = 35, H ⁽²⁾ = 65, L ⁽³⁾ = 100, V = 150, X = 200 At 600 V AC: N = 18, S = 22, H ⁽²⁾ = 25, L ⁽²⁾ = 50, V ⁽²⁾ = 65, X = 100 | 105 x 82.5 x 160 / (4.13 x 3.25 x 6.3) | TMF, Ekip DIP, Ekip Touch |
| XT5 | 400–600 | 3 | 600 | At 240 V AC: N = 65, S = 100, H = 150, L = 200, V = 200, X = 200 At 480 V AC: N = 35, S = 50, H ⁽²⁾ = 65, L ⁽³⁾ = 100, V = 150, X = 200 At 600 V AC: N = 18, S = 25, H ⁽¹⁾ = 35, L ⁽¹⁾ = 65, V = 100, X = 100 | 140 x 103 x 205 / (5.51 x 4.05 x 8.07) | TMA, Ekip DIP, Ekip Touch |
| XT6 | 800 | 3 | 600 | At 240 V AC: N = 65, S = 100, H = 200 At 480 V AC: N = 35, S = 50, H = 65 At 600 V AC: N = 20, S = 25, H = 35 | 210 x 103.5 x 268 / (8.27 x 4.07 x 10.55) | TMA, Ekip DIP |
| XT7 | 800–1000–1200 | 3 | 600 | At 240 V AC: S = 65, H = 100, L = 200 At 480 V AC: S = 50, H = 65, L = 100 At 600 V AC: S = 25, H = 50, L = 65 | 210 x 167 x 268 / (8.27 x 6.57 x 10.55) | Ekip DIP, Ekip Touch |

⁽¹⁾ Current-limiting circuit breaker in 480 V AC and 600 V AC

⁽²⁾ 600 Y/347 V AC

⁽³⁾ Dimensions include line-side connector and mounting bracket

Tmax XT DC ratings

| Model | Frame size (amps) | No. of poles | Rated voltage DC | Interrupt ratings (kA) | Dimensions – fixed, 3 poles W x D x H ⁽³⁾ mm (in.) | Trip units for power distribution |
|-------|-------------------|--------------|------------------|------------------------|---|-----------------------------------|
| | | | | | | |
| XT1 | 125 | 2 | 250 and 125 | N = 35, S = 42, H = 50 | 76.2 x 70 x 130 / (3 x 2.75 x 5.12) | TMF |
| XT2 | 125 | 2 | 250 and 125 | N = 35, S = 50 | 90 x 83.56 x 131.1 / (3.54 x 3.29 x 5.16) | TMF, TMA |
| XT4 | 250 | 2 | 250 and 125 | N = 35, S = 42, H = 50 | 105 x 82.5 x 160 / (4.13 x 3.25 x 6.3) | TMF |
| XT5 | 400–600 | 2 | 250 and 125 | N = 35, S = 50 | 140 x 103 x 205 / (5.51 x 4.05 x 8.07) | TMA |
| XT6 | 800 | 2 | 250 and 125 | N = 35, S = 50 | 210 x 103.5 x 268 / (8.27 x 4.07 x 10.55) | TMA |

⁽³⁾ Dimensions include line-side connector and mounting bracket

Record Plus® FB, Formula A2 and TEY molded case circuit breakers



1-pole FB



2-pole FB



1-pole TEY



2-pole TEY



2-pole Formula A2

Record Plus FB AC ratings

| | |
|-----------|---|
| Poles | 1, 2 |
| Amperes | 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100 |
| Trip unit | Fixed thermal-magnetic |

Interrupting ratings

| Ampere rating | Maximum voltage | Type | Poles | UL listed interrupting rating rms symmetrical kA AC voltage | | | | |
|---------------|-----------------|------|-------|---|-------|-------|-------|-------|
| | | | | 240 V | 277 V | 347 V | 480 V | 600 V |
| 15-100 | 600Y/347 V AC | FBV | 1 | 35 | 35 | 22 | - | - |
| | | | 2 | 65 | - | - | 35 | 22 |
| | | FBN | 1 | 65 | 65 | 25 | - | - |
| | | | 2 | 150 | - | - | 65 | 25 |
| FBH | 1 | 100 | 100 | 35 | - | - | | |
| | | 2 | 200 | - | - | 100 | 35 | |

TEY AC ratings

| | |
|-----------|---|
| Poles | 1, 2 |
| Amperes | 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125 |
| Trip unit | Fixed thermal-magnetic |

Interrupting ratings

| Ampere rating | Maximum voltage | Type | Poles | UL listed interrupting rating rms symmetrical kA AC voltage | |
|-----------------|------------------------|------|-------|---|-----------|
| | | | | 120/240 V | 480/277 V |
| 15-70 (1-pole) | 277 V AC (1-pole) | TEYD | 1-2 | 65 | 25 |
| 15-125 (2-pole) | 480Y/277 V AC (2-pole) | TEYH | 1-2 | 65 | 35 |
| | | TEYL | 1-2 | 100 | 65 |

Formula A2 AC ratings

| Ampere rating | Maximum voltage | Type | Poles | UL listed interrupting rating rms symmetrical kA AC voltage |
|---------------|-----------------|------|-------|---|
| | | | | 240 V |
| 125-250 | 240 V AC | A2A | 2 | 10 |
| | | A2N | 2 | 25 |

Record Plus[®] FB, Formula A2 and TEY molded case circuit breakers



1-pole FB



2-pole FB



1-pole TEY



2-pole TEY



2-pole Formula A2

Record Plus FB DC interrupting ratings

| Ampere rating | Type | Poles | UL listed interrupting rating kA DC voltage | |
|---------------|------|-------|---|------------------|
| | | | 125 V DC, 2-wire | 250 V DC, 2-wire |
| 15–100 | FBV | 2 | 25 | 25 |
| | FBN | 2 | 30 | 30 |
| | FBH | 2 | 42 | 42 |
| | FBL | 2 | 50 | 50 |

TEY DC interrupting ratings

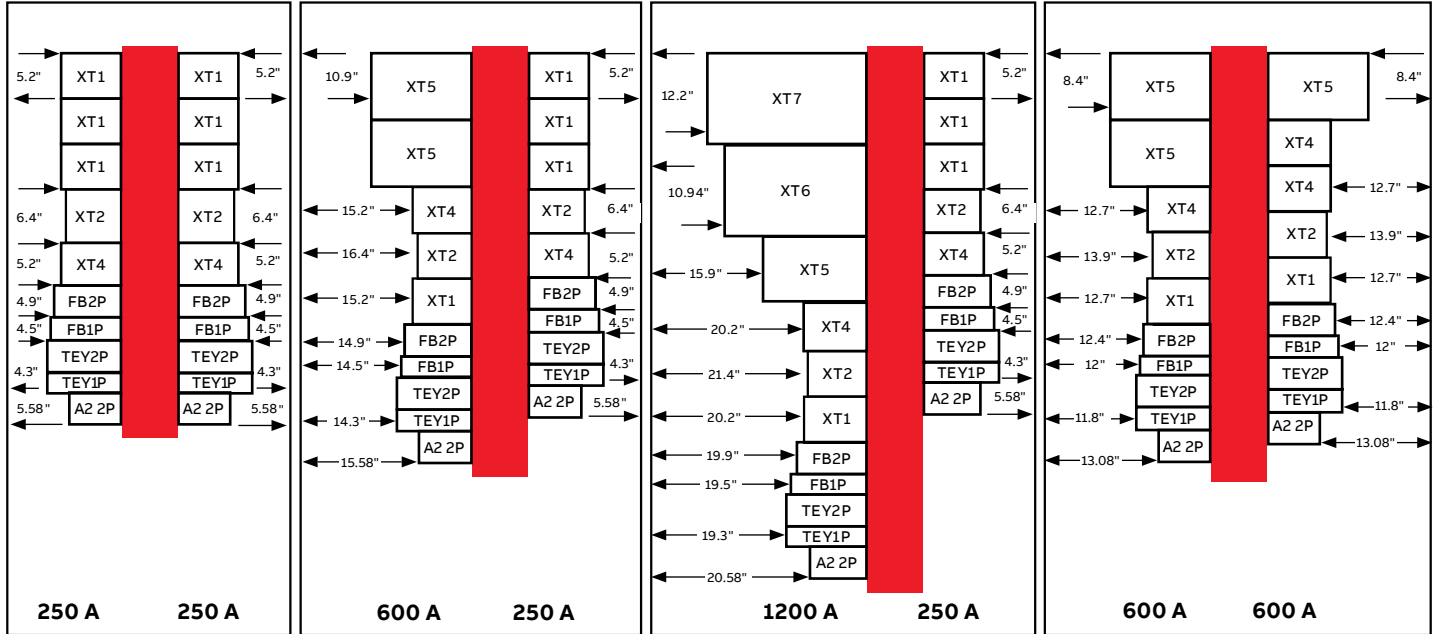
| Ampere rating | Type | Poles | UL listed interrupting rating kA DC voltage | |
|-----------------|------|-------|---|------------------|
| | | | 125 V DC, 2-wire | 250 V DC, 2-wire |
| 15–70 (1-pole) | TEYL | 1 | 14 | – |
| 15–125 (2-pole) | TEYL | 2 | 42 | 18 |

Formula A2 DC interrupting ratings

| Ampere rating | Type | Poles | UL listed interrupting rating kA DC voltage | |
|---------------|------|-------|---|------------------|
| | | | 125 V DC, 2-wire | 250 V DC, 2-wire |
| 125–250 | A2A | 2 | – | 10 |
| | A2N | 2 | – | 25 |

Wire bending and conduit space

Circuit breaker wire bending space



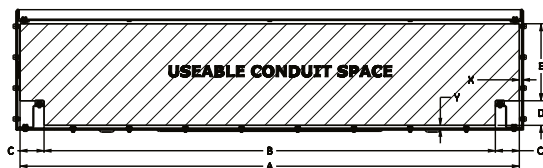
30" center box 40" offset box 45" offset box 45" center box

Typical available conduit space

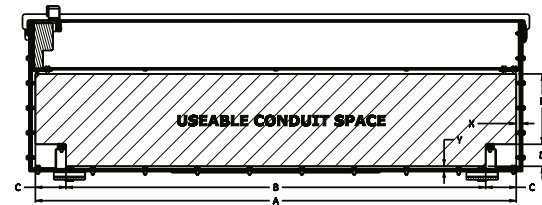
Conduit hubs should comply with the requirements in the Standard for Conduit, Tubing, and Cable Fittings, UL 514B. Conduit hubs should comply with the requirements of the UL 50E NEMA rating of the ReliaGear neXT enclosure on which they are installed to maintain the enclosure's rating. Consider your specific neutral and ground configuration when planning conduit space. For additional dimensional detail, reference document 15QC900008M0201.

| Conduit space (top and bottom) | Enclosure width | Enclosure type | | | |
|---------------------------------------|-----------------|----------------|---------|---------|--------------|
| | | NEMA 1 | NEMA 2* | NEMA 3R | NEMA 4/4X/12 |
| A (in.) | 45 | | 44 | | 46 |
| | 40 | | 39 | | 41 |
| | 30 | | 29 | | 31 |
| B (in.) | 30/40/45 | | | | 40 |
| C (in.) | 30/40/45 | | 2 | 2.9 | 3.3 |
| D (in.) | 30/40/45 | | | | 2.2 |
| E (in.) | 30/40/45 | | | | 6.7 |
| Y (in.) (distance off backwall) | 30/40/45 | 0.35 | 0.45 | 0.45 | 0.38 |
| X (in.) (distance off right sidewall) | 30/40/45 | 0.25 | 0.4 | 0.5 | 0.1 |

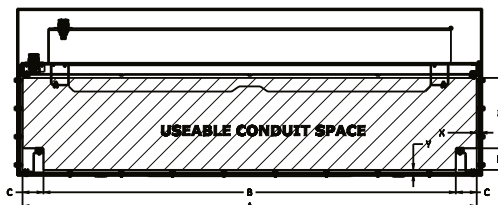
*NEMA 2 has double top wall due to drip hood. All other enclosure conduit space is a single thickness of sheet metal.



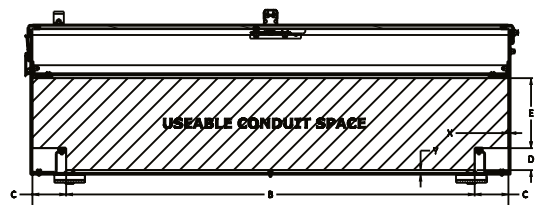
Top and bottom NEMA 1



Top and bottom NEMA 3R



Top and bottom NEMA 2



Top and bottom NEMA 4/4X/12

General information

General

- Panelboards are listed and labeled by Underwriters Laboratories, Inc. in accordance with UL Standards 50 and 67, and shall conform to the latest requirements of the National Electrical Code (NEC) and NEMA Standard PB.1.
- The panelboard will meet service entrance requirements when specified.
- Boxes are furnished without knockouts. Panel boxes and fronts are cold-rolled steel and furnished with ANS1 light gray polyester textured powder coat.
- A four-piece front and hinged gutter covers are provided by default to provide ease of wiring access. All screw fasteners are ¼–20 thread and zinc coated to retard corrosion.
- Main and branch circuit breakers shall be quick-make, quick-break and trip-indicating. Interrupting rating of the circuit breaker shall not be less than the maximum short-circuit currents available at the incoming line terminals as shown on the plans.
- ReliaGear nexT circuit breakers are compatible with ReliaGear SB switchboards. ReliaGear nexT components are not compatible with any other panelboard type.

Publications

| Title | Document number |
|---|-----------------|
| Guideform specification | 15QC900001D0201 |
| Assembly Instructions — Factory assembled | 15QC900004M0201 |
| Assembly Instructions — Bulk pack | 15QC900003M0201 |
| Door-in-door instructions | 15QC900002M0201 |
| Dual main lugs | 15QC900009M0201 |
| Grounds and neutrals | 15QC900007M0201 |
| NEMA 3R, 4, 4X and 12 enclosures | 15QC900008M0201 |
| RELT unit | 15QC900005M0201 |
| SPD unit | 15QC900006M0201 |
| AMP1 main circuit breaker meter | 15QC900001M0201 |
| Service entrance barrier | 15QC900010M0201 |
| Solid neutral and ground fault neutral | 15QC900007M0201 |
| Submetering | 15QC900016M0201 |
| Drip hood installation | 15QC900013M0201 |
| Replacement part kits | 15QC900015M0201 |
| Lifting bar instructions | 15QC900017M0201 |

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