

Explosion Proof Power Contactors EXPC*

- 3-pole non-reversing contactors for Division 1 / Zone 1
- Preconfigured line and load ports
- Copper-free cast aluminum housing Type 4X / IP66
- Breather drain and hinged cover standard
- Incorporates Eaton XT IEC Power Control contractors

Explosion Proof Power Contactors











Function

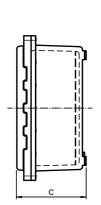
Model EXPC Explosion Proof Power contactors are non-reversing electrical "relays" contained within an explosion proof housing. The contactors have inductive power ranges from 18 ...170 amps and are offered with 120 VAC, 220 VAC, or 24 VDC operating coils to accommodate a wide array of power control applications.

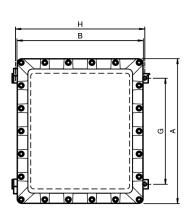
The explosion proof enclosures housing the contactors are suitable for Class I, Division I, Groups B, C, and D; Class II, Division 1, Groups E, F, and G; and Class I, Zone I, Group IIB hazardous location ratings. The housings are rated for Type 4X / IP66 service capability and are furnished with door hinges. The housings graduate in size to accommodate each contactor while providing adequate space for wire bend radius limitations established by the National Electric Code (NEC).

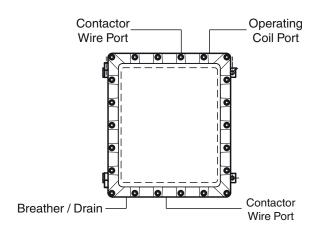
The contactor is activated by the application of control voltage to the operating coil. The contactor then engages the non-reversing normally-open contactor poles to apply power to the protected enclosure or controlled device. The contactor is deactivated by removing control voltage from the operating coil. The contactor then disengages the poles, thus removing power from the protected enclosure or controlled device.

Assembly

| | EXPC Enclosure Specifications | | | | | | | | | | | | |
|---------------|-------------------------------|-------|------------------------|-------|-------------------|----------|------------------------|------------|-------------|--------------|------|--------|-------------|
| Unit Model | External Dimensions | | Mounting Dimensions | | Coil Port Size | | Contactor Port Size | | Min. AWG | Cover Screws | | Screws | |
| Number | Α | В | С | Н | G | - | М | I | М | | Size | Qty | Torque (Nm) |
| EXPC-18 | 10" | 8.5" | 6.8" | 8.1" | 7.4" | 1/2" NPT | M20 | 3/4" NPT | M25 | 12 | M8 | 10 | 30 |
| EXPC-25 | 10" | 8.5" | 6.8" | 8.1" | 7.4" | 1/2" NPT | M20 | 3/4" NPT | M25 | 10 | M8 | 10 | 30 |
| EXPC-32 | 10" | 8.5" | 6.8" | 8.1" | 7.4" | 1/2" NPT | M20 | 3/4" NPT | M25 | 8 | M8 | 10 | 30 |
| EXPC-40 | 10" | 8.5" | 6.8" | 8.1" | 7.4" | 1/2" NPT | M20 | 3/4" NPT | M25 | 8 | M8 | 10 | 30 |
| EXPC-50 | 10" | 8.5" | 6.8" | 8.1" | 7.4" | 1/2" NPT | M20 | 3/4" NPT | M25 | 8 | M8 | 10 | 30 |
| EXPC-65 | 10" | 8.5" | 6.8" | 8.1" | 7.4" | 1/2" NPT | M20 | 3/4" NPT | M25 | 6 | M8 | 10 | 30 |
| EXPC-80 | 15.5" | 11.5" | 7.8" | 9.8" | 11.1" | 1/2" NPT | M20 | 1" NPT | M32 | 4 | M8 | 14 | 30 |
| EXPC-95 | 15.5" | 11.5" | 7.8" | 9.8" | 11.1" | 1/2" NPT | M20 | 1" NPT | M32 | 3 | M8 | 14 | 30 |
| EXPC-115 | 15.5" | 11.5" | 7.8" | 9.8" | 11.1" | 1/2" NPT | M20 | 1" NPT | M32 | 2 | M8 | 14 | 30 |
| EXPC-150 | 23.7" | 17.8" | 11" | 16.9" | 18.1" | 1/2" NPT | M20 | 1 1/2" NPT | M50 | 1/0 | M10 | 20 | 40 |
| EXPC-170 | 23.7" | 17.8" | 11" | 16.9" | 18.1" | 1/2" NPT | M20 | 1 1/2" NPT | M50 | 2/0 | M10 | 20 | 40 |







Wire Port Locations

Technical Data

| Electrical specifications | | |
|----------------------------------|----------------|--|
| Electrical specifications | | |
| Operating voltage | 115 460 V | |
| Rated frequency | 50/60 Hz | |
| Short circuit current limitation | see data table | |
| Operating current | 18 A - 170 A | |
| Rated insulation voltage | 690 V | |
| Function | Power control | |
| Contact configuration | see data table | |
| Usage category | see data table | |

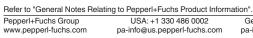
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| Technical Data | |
|---|---|
| Number of poles | see data table |
| Auxiliary contacts | One (1) normally open contact |
| Auxiliary contacts usage category | see data table |
| Mechanical specifications | |
| Thread type | metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1 |
| Enclosure range | EJB |
| Enclosure cover | fully detachable |
| Cover fixing | stainless steel socket cap head screws |
| Screws | see data table |
| Yield stress | min. 450 N/mm ² |
| Cover seal | none |
| Flamepath grease | Greasil MS4 or NEVER SEEZ Marine Grade |
| Degree of protection | Type 4, 4X, 7, 9 / IP66 |
| Cable entry | see data table |
| Defined entry area | face B |
| Material | |
| Enclosure | Copper-free aluminum alloy or 316L stainless steel |
| Finish | For aluminum: epoxy coated RAL 7005 (grey) |
| Mass | see data table |
| Dimensions | see data table values might differ slightly due to casting and manufacturing tolerances |
| Tightening torque | |
| Nut torque at enclosure (SW1) | see datasheets of stopping plugs |
| Mounting | see data table |
| Grounding | M6 external grounding points |
| Ambient conditions | |
| Ambient temperature | -20 50 °C (-4 122 °F) @ T6 |
| Data for application in connection with hazardo | ous areas |
| EU-type examination certificate | INERIS 14 ATEX 0022X |
| Marking | Is I 2 GD Ex d IIB+H₂ T* Gb Ex tb IIIC Db |
| International approvals | |
| UL approval | Enclosure only |
| cULus | Class I, Division 1, Groups B, C, D Class II, Division 1, Groups E, F, G |
| IECEx approval | IECEx INE 14.0029X |
| Conformity | |
| Degree of protection | EN60529 |
| Usage category | IEC / EN 60947 |
| CE marking | 0539 |
| General information | |
| Supplementary information | EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com. |
| | |

Technical Features

EXPC Contactor Specifications

| | Max. Current [A] | Max. Power [PS] | | | | |
|---------|------------------|-----------------|-------|--------------|-------|--|
| number | | Single phase | | Three phases | | |
| | | 115 V | 230 V | 230 V | 480 V | |
| EXPC-18 | 18 | 2 | 3 | 5 | 10 | |
| EXPC-25 | 25 | 2 | 5 | 10 | 15 | |
| EXPC-32 | 32 | 3 | 5 | 10 | 20 | |
| EXPC-40 | 40 | 3 | 7.5 | 15 | 30 | |
| EXPC-50 | 50 | 3 | 10 | 20 | 40 | |



Technical Features

| Model | Max. Current [A] | Max. Power [PS] | | | | |
|----------|------------------|-----------------|-------|--------------|-------|--|
| number | | Single phase | | Three phases | | |
| | | 115 V | 230 V | 230 V | 480 V | |
| EXPC-65 | 65 | 5 | 15 | 25 | 50 | |
| EXPC-80 | 80 | 7.5 | 15 | 30 | 60 | |
| EXPC-95 | 95 | 7.5 | 15 | 40 | 75 | |
| EXPC-115 | 115 | 10 | 25 | 50 | 100 | |
| EXPC-150 | 150 | 10 | 30 | 60 | 125 | |
| EXPC-170 | 170 | 10 | 30 | 60 | 125 | |

Type Code

| 1 | | 2 | | 3 | | 4 | | 5 |
|------|---|-----|---|-----|---|---|---|---|
| EXPC | - | *** | - | *** | | * | - | * |
| EXPC | - | 25 | - | 120 | - | I | - | Α |

Example: EXPC-25-120-I-A Explosion Proof Power Contactor 25 A, coil voltage 120 V AC, cable entry NPT thread, enclosure material copper-free aluminum

| 1 | Device type |
|--------|---------------------------------|
| EXPC | explosion proof power contactor |
| | |
| 2 | Current rating |
| 18 170 | [A] see data table |
| | |
| 3 | Coil voltage |
| 24 | 24 V DC |

| 24 | 24 V DC |
|-----|----------|
| 120 | 120 V AC |
| 220 | 220 V AC |
| | |

| 4 | Thread type |
|---|-------------------------|
| I | NPT ANSI ASME B1.20.1 |
| M | metric ISO pitch 1.5 mm |

| 5 | Enclosure material |
|---|---------------------------|
| A | copper-free Aluminum |
| S | stainless steel AISI 316L |

Application

