



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 contactors

Explosion Proof Power Contactors



Function

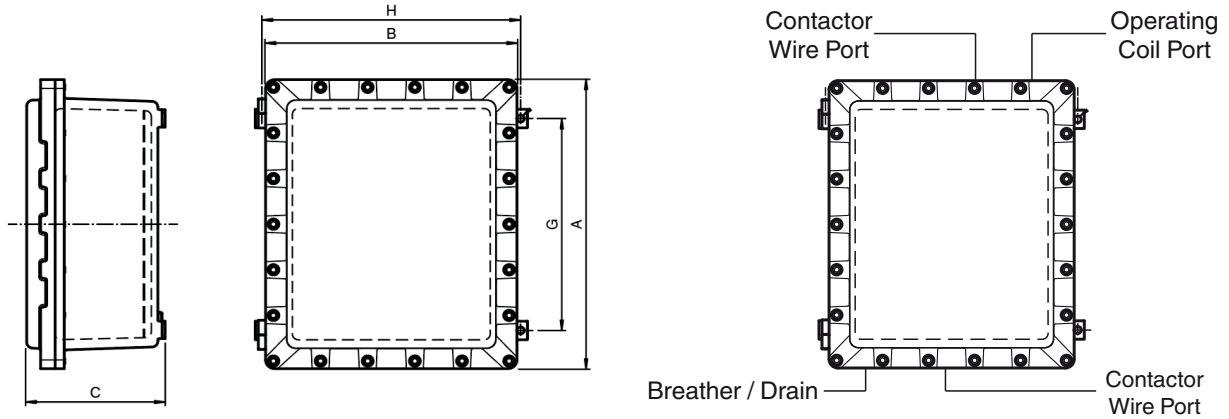
Model EXPC Explosion Proof Power contactors are non-reversing electrical "relays" contained within an explosionproof housing. The contactors have inductive power ranges from 18 ... 170 amps and are offered with 120 VAC, 220 VAC, or 24 VDC operating coils to accommodate a wide array of power control applications.

The explosionproof 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 Number	External Dimensions			Mounting Dimensions		Coil Port Size		Contactor Port Size		Min. AWG	Cover Screws		
	A	B	C	H	G	I	M	I	M		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	
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

Release date: 2022-06-15 Date of issue: 2022-06-15 Filename: t206273_eng.pdf

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 hazardous areas	
EU-type examination certificate	INERIS 14 ATEX 0022X
Marking	Ⓢ II 2 GD Ex d IIB+H ₂ 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

Model number	Max. Current [A]	Max. Power [PS]			
		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 number	Max. Current [A]	Max. Power [PS]			
		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	-	A

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
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

