DATASHEET - J16/B/N

Main switch, 16 A, surface mounting, 3 pole + N, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position

Part no. **J16/B/N**
199730

Product name	Eaton J-Range enclosed switch-disconnector
Part no.	J16/B/N
EAN	5027590551984
Product Length/Depth	115 millimetre
Product height	180 millimetre
Product width	100 millimetre
Product weight	0.447 kilogram
Certifications	IEC/EN 60947-3 IEC/EN 60947 VDE 0660 IEC/EN 60204
Product Tradename	J-Range
Product Type	Enclosed switch-disconnector
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Features	Version as maintenance-/service switch Version as main switch
Fitted with:	Push-through cable entry diaphragm Black rotary handle and locking ring Assembly sheet screen
Functions	Interlockable STOP function
Locking facility	Lockable in the 0 (Off) position
Number of poles	Three-pole
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	300,000 Operations
Mounting method	Surface mounting
Mounting position	As required
Operating frequency	1200 Operations/h
Overvoltage category	III
Pollution degree	3
Product Category	Main switch
Rated impulse withstand voltage (Uimp)	6000 V AC
Safe isolation	440 V AC, Between the contacts, According to EN 61140
Safety parameter (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms
Suitable for	Ground mounting
Ambient operating temperature (enclosed) - min	-25 °C
Ambient operating temperature (enclosed) - max	40 °C
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Terminal capacity	1 x (1.5 - 10) mm^2, solid or stranded 1 x (1 - 4) mm^2, flexible with ferrules to DIN 46228 2 x (1 - 4) mm^2, flexible with ferrules to DIN 46228 2 x (1.5 - 6) mm^2, solid or stranded
Screw size	M4, Terminal screw
Tightening torque	1.6 Nm, Screw terminals

Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	260 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	300 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	290 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	250 A
Rated operational current (Ie) at AC-21, 440 V	16 A
Rated operational current (Ie) at DC-1, load-break switches l/r = 1 ms	16 A
Rated operational power at AC-3, 380/400 V, 50 Hz	0 kW
Rated operational power at AC-23A, 400 V, 50 Hz	7 kW
Rated operational voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	16 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.
Rated conditional short-circuit current (Iq)	80 kA
Rated short-time withstand current (Icw)	640 A, Contacts, 1 second 0.64 kA
Short-circuit protection rating	50 A gG/gL, Fuse, Contacts
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	320 A
Voltage per contact pair in series	60 V
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Actuator color	Black
Actuator type	Door coupling rotary drive
10.2.2 Corrosion resistance	Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	Meets the product standard's requirements.
10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of assemblies	Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances	Meets the product standard's requirements.
10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch	Yes

Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	415 - 690
Rated permanent current Iu	A	16
Rated permanent current at AC-23, 400 V	A	
Rated permanent current at AC-21, 400 V	A	16
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current Icw	kA	0.64
Rated operation power at AC-23, 400 V	kW	7
Switching power at 400 V	kW	
Conditioned rated short-circuit current Iq	kA	80
Number of poles		3
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Complete device in housing
Suitable for floor mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Black
Type of control element		Door coupling rotary drive
Interlockable		Yes
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP65
Degree of protection (NEMA)		12