

Auxiliary contact module, 2N/O+2N/C

Part no. DILM150-XHI22
Article no. 277950
Catalog No. XTCEXFBG22



Delivery programme

Delivery programme			
Product range			Accessories
Accessories			Auxiliary contact modules
Description			with interlocked opposing contacts
Function			for standard applications
Pole			4 pole
Connection technique			Screw terminals
Rated operational current			
AC-3			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 60 °C	$I_{th} = I_e$	Α	16
AC-15			
220 V 230 V 240 V	I _e	Α	6
380 V 400 V 415 V	l _e	Α	4
Contacts			
N/O = Normally open			2 N/O
N/C = Normally closed			2 NC
Mounting type			Front fixing
Contact sequence			13 L21 L31 L43 14 L22 32 44
For use with			DILM40 DILM50 DILM65 DILM72 DILM80 DILM95 DILM15 DILM150 DILM170
Instructions			Interlocked opposing contacts according to IEC/EN 60947-5-1 appendix L, inside the auxiliary contact modules, also for the integrated auxiliary contacts of the DILM 7 - DILM32 Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open)

Technical data

Electrical specifications for standard auxiliary contacts

60947-4-1 Annex F) Rated impulse withstand voltage Overvoltage category/pollution degree Rated insulation voltage Rated operational voltage V AC V AC Safe isolation to EN 61140 between coil and auxiliary contacts V AC V AC V AC 440				
60947-4-1 Annex F) Rated impulse withstand voltage Overvoltage category/pollution degree Rated insulation voltage Rated operational voltage V AC V AC Safe isolation to EN 61140 between coil and auxiliary contacts V AC V AC V AC 440				Yes
Overvoltage category/pollution degree Rated insulation voltage Rated operational voltage V AC Safe isolation to EN 61140 between coil and auxiliary contacts between the auxiliary contacts V AC V AC 440	N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F)			DILM40 - DILM170
Rated insulation voltage Ruted operational voltage Ue VAC 500 Safe isolation to EN 61140 between coil and auxiliary contacts VAC 440 between the auxiliary contacts VAC 440	Rated impulse withstand voltage	U_{imp}	V AC	6000
Rated operational voltage Safe isolation to EN 61140 between coil and auxiliary contacts between the auxiliary contacts V AC 440 V AC 440	Overvoltage category/pollution degree			III/3
Safe isolation to EN 61140 between coil and auxiliary contacts V AC 440 between the auxiliary contacts V AC 440	Rated insulation voltage	U_{i}	V AC	690
between coil and auxiliary contacts V AC 440 V AC 440	Rated operational voltage	U _e	V AC	500
between the auxiliary contacts V AC 440	Safe isolation to EN 61140			
·	between coil and auxiliary contacts		V AC	440
Rated operational current A	between the auxiliary contacts		V AC	440
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Rated operational current		Α	

Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 60 °C	$I_{th} = I_e$	Α	16
AC-15			
220 V 230 V 240 V	I _e	Α	6
380 V 400 V 415 V	le	Α	4
500 V	I _e	Α	1.5
Control circuit reliability	Failure rate	λ	$<\!10^{-8},<$ one failure at 100 million operations (at Ue = 24 V DC, Umin = 17 V, Imin = 5.4 mA)
Component lifespan			
at U _e = 230 V, AC-15, 3 A	Operations	x 10 ⁶	1.3
Short-circuit rating without welding			
max. fuse		A gG/gL	16

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	4
Heat dissipation per pole, current-dependent	P_{vid}	W	0.23
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
EC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $$			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			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 Insulation properties			
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 switch gear 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 6.0

Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss8.1-27-37-13-02 [AKN342010])

Number of contacts as change-over contact		0
Number of contacts as normally open contact		2
Number of contacts as normally closed contact		2
Rated operation current le at AC-15, 230 V	А	6
Type of electric connection		Screw connection
Model		Top mounting
Mounting method		Front fastening

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 IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
E29184
NKCR
012528
3211-03
UL listed, CSA certified
No

Additional product information (links)

IL03407034Z (AWA2100-2251) Auxiliary contact	IL03407034Z (AWA2100-2251) Auxiliary contact				
IL03407034Z (AWA2100-2251) Auxiliary contact	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407034Z2010_10.pdf				
UL/CSA: Approved rating data	http://de.ecat.moeller.net/flip-cat/?edition=HPLTE&startpage=5.84				
Switchgear of Power Factor Correction Systems	http://www.moeller.net/binary/ver_techpapers/ver934en.pdf				
X-Start - Modern Switching Installations Efficiently Fitted and Wired Securely	http://www.moeller.net/binary/ver_techpapers/ver938en.pdf				
Mirror Contacts for Highly-Reliable Information Relating to Safety-Related Control Functions	http://www.moeller.net/binary/ver_techpapers/ver944en.pdf				
Effect of the Cabel Capacitance of Long Control Cables on the Actuation of Contactors	http://www.moeller.net/binary/ver_techpapers/ver949en.pdf				
Motor starters and "Special Purpose Ratings" for the North American market	http://www.moeller.net/binary/ver_techpapers/ver953en.pdf				
Switchgear for Luminaires	http://www.moeller.net/binary/ver_techpapers/ver955en.pdf				
Standard Compliant and Functionally Safe Engineering Design with Mechanical Auxiliary Contacts	http://www.moeller.net/binary/ver_techpapers/ver956en.pdf				
The Interaction of Contactors with PLCs	http://www.moeller.net/binary/ver_techpapers/ver957en.pdf				
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf				