DATASHEET - DILM820-XHI11-SI



Auxiliary contact module, 2 pole, Ith= 10 A, 1 N/O, 1 NC, Side mounted, Screw terminals, DILM250 - DILH2600, SI

Powering Business Worldwide*

Part no. DILM820-XHI11-SI
Catalog No. 208281
Alternate Catalog XTCEXSBR11

No.

EL-Nummer 4110236

(Norway)

 $Similar \ to \ illustration$

Delivery program

Delivery program			
Accessories			Auxiliary contact modules
Description			with interlocked opposing contacts
Function			for standard applications
Number of poles			2 pole
Connection technique			Screw terminals
Rated operational current			
Conventional free air thermal current, 1 pole			
Open			
at 60 °C	I _{th}	Α	10
AC-15			
220 V 230 V 240 V	le	Α	6
380 V 400 V 415 V	l _e	Α	4
380 V 400 V 500 V	I _e	Α	1.5
Contacts			
N/O = Normally open			1 N/O
N/C = Normally closed			1 NC
Mounting type			Side mounted
Contact sequence			13 • †† 21 • 7E
For use with			DILM250 - DILH2600 DILDC300 - DILDC600
Туре			Side-mounting auxiliary contacts
Instructions			Interlocked opposing contacts according to IEC/EN 60947-5-1 Appendix L, inside the auxiliary contact module Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open)

Technical data General

Standards			IEC/EN 60947, VDE 0660, UL, CSA
Component lifespan			
at U _e = 230 V, AC-15, 3 A	Operations	x 10 ⁶	1.3
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-40 - +60
Enclosed		°C	- 25 - 40
Ambient temperature, storage		°C	- 40 - 80
Degree of Protection			IP20

Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Weight		kg	0.037
Terminal capacities		mm ²	
Screw terminals			
Solid		mm ²	1 x (0.75 - 2.5)
			2 x (0.75 - 2.5)
Flexible with ferrule		mm ²	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Solid or stranded		AWG	18 – 14
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	0.8 x 5.5
			1x6
Max. tightening torque Contacts		Nm	1.2
Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5	-1		Yes
Annex L) N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN			DILM250 - DILH2600
60947-4-1 Annex F) Rated impulse withstand voltage	Hs.	V AC	6000
Overvoltage category/pollution degree	U _{imp}	V AC	III/3
Rated insulation voltage	U _i	V AC	690
Rated operational voltage		V AC	
Safe isolation to EN 61140	U _e	V AC	500
between coil and auxiliary contacts		V AC	440
between ton and auxiliary contacts between the auxiliary contacts		V AC	440
Between auxiliary contacts Between auxiliary contacts and main contacts		V AC	440
Rated operational current		A	710
Conventional free air thermal current, 1 pole		· ·	
at 60 °C	I _{th}	Α	10
AC-15	ui		
220 V 230 V 240 V	I _e	Α	6
380 V 400 V 415 V	I _e	Α	4
500 V	I _e	Α	1.5
DC current	C		
			Switch-on and switch-off conditions based on DC-13, time constant as specified.
DC L/R ≤ 15 ms			, , , , , , , , , , , , , , , , , , , ,
Contacts in series:		Α	
1	24 V	Α	10
1	60 V	Α	6
1	110 V	Α	3
1	220 V	Α	1
DC-13 (6xP)			
24 V	I _e	Α	2
60 V	I _e	Α	1.5
110 V	I _e	Α	0.8
220 V	I _e	Α	0.3
Control circuit reliability	Failure rate	λ	$<10^{-8}$, $<$ one failure at 100 million operations (at $U_e=24$ V DC, $U_{min}=17$ V, $I_{min}=5.4$ mA)
Short-circuit rating without welding			
Maximum overcurrent protective device			
Short-circuit protection only			FAZ-C4/1
Short-circuit protection maximum fuse			
500 V		A gG/gL	16
Rated conditional short-circuit current 500 V	I_q	kA	1
Current heat loss at I_{th}			
AC operated		W	0.69

Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	0.11	
Rating data for approved types				
Auxiliary contacts				
Pilot Duty				
AC operated			A600	
DC operated			P300	
General Use				
AC		V	600	
AC		Α	15	
DC		V	250	
DC		Α	1	

0.69

Design verification as per IEC/EN 61439

DC operated

Design verincation as per 126/214 01433			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	6
Heat dissipation per pole, current-dependent	P _{vid}	W	0.11
Equipment heat dissipation, current-dependent	P _{vid}	W	0.25
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-40
Operating ambient temperature max.		°C	60
IEC/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 switch gear must be observed. $\label{eq:specification}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. $\label{eq:continuous}$

Technical data ETIM 7.0

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@ss10.0.1-27-37-13-02 [AKN342013])

Number of contacts as change-over contact 0

Number of contacts as normally open contact		1
Number of contacts as normally closed contact		1
Number of fault-signal switches		0
Rated operation current le at AC-15, 230 V	Α	6
Type of electric connection		Screw connection
Model		Top mounting
Mounting method		Side mounting
Lamp holder		None

Approvals

Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	012528
CSA Class No.	3211-04
North America Certification	UL listed, CSA certified
Specially designed for North America	No

Additional product information (links)

Motor starters and "Special Purpose Ratings" for the North American market	http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf
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
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