DATASHEET - DILM1000-XHI11-SI



Auxiliary contact module, 2 pole, Ith= 10 A, 1 N/O, 1 NC, Side mounted, Screw terminals, DILM40 - DILM225A, -SI



DILM1000-XHI11-SI Part no. 278425 Catalog No. Alternate Catalog XTCEXSBN11 No. 4130490 **EL-Nummer** (Norway)

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}	A	10
AC-15			
220 V 230 V 240 V	l _e	А	4
380 V 400 V 415 V	l _e	А	4
380 V 400 V 500 V	l _e	А	4
Contacts			
N/O = Normally open			1 N/O
N/C = Normally closed			1 NC
Mounting type			Side mounted
Contact sequence			13 • t t 21 • 76
For use with			DILM40 - DILM225A DILMP63 - DILMP200 DILMF40 - DILMF95
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	-25 - +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	0.041
Terminal capacities		mm ²	
Screw terminals			

Solid		mm ²	1 x (0.75 - 2.5)
Flexible with fermula		2	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 1 x 6
Max. tightening torque		Nm	12
Contacts Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5- Annex L)	1		Yes
N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F)			DILM40 - DILM225A
Rated impulse withstand voltage	U _{imp}	V AC	6000
Overvoltage category/pollution degree			111/3
Rated insulation voltage	Ui	V AC	690
Rated operational voltage	U _e	V AC	500
Safe isolation to EN 61140	C		
between coil and auxiliary contacts		V AC	440
between the auxiliary contacts		V AC	440
Between auxiliary contacts and main contacts		V AC	440
Rated operational current		A	
Conventional free air thermal current, 1 pole		~	
at 60 °C	I _{th}	A	10
	'th	~	
AC-15		٨	
220 V 230 V 240 V	l _e	A	4
380 V 400 V 415 V	l _e	A	4
500 V	l _e	A	1.5
DC current			
DC current DC L/R ≦ 15 ms			Switch-on and switch-off conditions based on DC-13, time constant as specified.
		A	Switch-on and switch-off conditions based on DC-13, time constant as specified.
DC L/R ≦ 15 ms	24 V	A	Switch-on and switch-off conditions based on DC-13, time constant as specified.
DC L/R ≦ 15 ms Contacts in series:	24 V 60 V		
DC L/R ≦ 15 ms Contacts in series: 1		А	10
DC L/R ≦ 15 ms Contacts in series: 1 1	60 V	A A	10 6
DC L/R ≦ 15 ms Contacts in series: 1 1 1	60 V 110 V	A A A	10 6 3
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 1	60 V 110 V	A A A	10 6 3
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 1 DC-13 (6xP)	60 V 110 V 220 V	A A A	10 6 3 1
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V	60 V 110 V 220 V I _e I _e	A A A A	10 6 3 1 2
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V	60 V 110 V 220 V I _e I _e	A A A A A A	10 6 3 1 2 1.5 0.8
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V	60 V 110 V 220 V I _e I _e I _e	A A A A A A A A	10 6 3 1 2 1.5 0.8 0.3
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V	60 V 110 V 220 V I _e I _e	A A A A A A	10 6 3 1 2 1.5 0.8
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V	60 V 110 V 220 V I _e I _e I _e	A A A A A A A A	10 6 3 1 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations
DC L/R ≤ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability	60 V 110 V 220 V I _e I _e I _e	A A A A A A A A	10 6 3 1 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations
DC L/R ≤ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability Short-circuit rating without welding	60 V 110 V 220 V I _e I _e I _e	A A A A A A A A	10 6 3 1 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA)
DC L/R ≤ 15 ms Contacts in series: 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability Short-circuit protection maximum fuse	60 V 110 V 220 V I _e I _e I _e	A A A A A A A A A λ	10 6 3 1 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA)
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability Short-circuit rating without welding Short-circuit protection maximum fuse 500 V	60 V 110 V 220 V I _e I _e I _e Failure rate	A A A A A A A A A A A G/gL	10 6 3 1 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) 16
DC L/R ≤ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability Short-circuit rating without welding Short-circuit protection maximum fuse 500 V Rated conditional short-circuit current 500 V	60 V 110 V 220 V I _e I _e I _e Failure rate	A A A A A A A A A A A G/gL	10 6 3 1 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) 16
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability Short-circuit reliability Short-circuit rating without welding Short-circuit protection maximum fuse 500 V Rated conditional short-circuit current 500 V Current heat loss at l _{th}	60 V 110 V 220 V I _e I _e I _e Failure rate	A A A A A A A A A A A A A G/gL kA	10 6 3 1 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) 16 1
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability Short-circuit reliability Short-circuit reliability Short-circuit rating without welding Short-circuit protection maximum fuse 500 V Rated conditional short-circuit current 500 V Current heat loss at l _{th} AC operated	60 V 110 V 220 V I _e I _e I _e Failure rate	A A A A A A A A A A A A G G/gL k A W	10 6 3 1 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) 16 1 0.69
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability Short-circuit reliability Short-circuit reliability Short-circuit notection maximum fuse 500 V Rated conditional short-circuit current 500 V Current heat loss at l _{th} AC operated DC operated	60 V 110 V 220 V I _e I _e I _e Failure rate	A A A A A A A A A G G/gL kA W W	10 6 3 1 2 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) 16 1 0.69 0.69
DC L/R ≤ 15 ms 10 220 V Control circuit reliability Short-circuit protection maximum fuse 500 V Rated conditional short-circuit current 500 V Current heat loss at l _{th}	60 V 110 V 220 V I _e I _e I _e Failure rate	A A A A A A A A A G G/gL kA W W	10 6 3 1 2 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) 16 1 0.69 0.69
DC L/R ≤ 15 ms 10 220 V Control circuit reliability Short-circuit protection maximum fuse 500 V Rated conditional short-circuit current 500 V Current heat loss at l _{th}	60 V 110 V 220 V I _e I _e I _e Failure rate	A A A A A A A A A G G/gL kA W W	10 6 3 1 2 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) 16 1 0.69 0.69
DC L/R ≦ 15 ms Contacts in series: 1 1 1 1 DC-13 (6xP) 24 V 60 V 110 V 220 V Control circuit reliability Short-circuit reliability Short-circuit retiability Short-circuit protection maximum fuse 500 V Rated conditional short-circuit current 500 V Current heat loss at l _{th} AC operated DC operated DC operated Current heat loss per auxiliary circuit at l _e (AC-15/230 V) Rating data for approved types Auxiliary contacts	60 V 110 V 220 V I _e I _e I _e Failure rate	A A A A A A A A A G G/gL kA W W	10 6 3 1 2 2 1.5 0.8 0.3 <10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) 16 1 0.69 0.69

General Use		
AC	V	600
AC	А	15
DC	V	250
DC	А	1

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	0.11
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
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 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 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	A	4	6
Type of electric connection			Screw connection
Model			Top mounting
Mounting method			Side mounting

Lamp holder	None
Anneurole	
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