### **DATASHEET - DILM150-XHIV22**



### Auxiliary contact module, 1N/O+1N/O early+1N/C+1N/C late

Powering Business Worldwide\*

Part no. DILM150-XHIV22
Catalog No. 277953
Eaton Catalog No. XTCEXFBLG22
EL-Nummer 4110342

(Norway)

**Delivery program** 

Delivery program			
Product range			Accessories
Accessories			Auxiliary contact modules
Function			for standard applications
Number of poles			4 pole
Connection technique			Screw terminals
Rated operational current			
Conventional free air thermal current, 1 pole			
Open			
at 60 °C	$I_{th}$	Α	16
AC-15			
220 V 230 V 240 V	I <sub>e</sub>	Α	6
380 V 400 V 415 V	I <sub>e</sub>	Α	4
Contacts			
N/0 = Normally open			1 N/0
N/O <sub>E</sub> : NO early-make			1 N/0 <sub>E</sub>
N/C = Normally closed			1 NC
NC <sub>L</sub> =NC late-break			1 NC <sub>L</sub>
Mounting type			Front fixing
Contact sequence			13 21 35 47 
For use with			DILM40 DILM50 DILM65 DILM72 DILM80 DILM80 DILM15 DILM150 DILM170 DILM170 DILMP63 DILMP63 DILMP80 DILMP125 DILMP140 DILMF40 DILMF50 DILMF50 DILMF50 DILMF65 DILMF65 DILMF95
Туре			Front mounting auxiliary contact
Instructions			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**

Licetical specifications for standard duxinary contacts			
Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5-1 Annex L)			No
N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F)			DILM40 - DILM170
Overvoltage category/pollution degree			III/3
Rated insulation voltage	$U_{i}$	V AC	690

Rated operational voltage	U <sub>e</sub>	V AC	500
Safe isolation to EN 61140			
between coil and auxiliary contacts		V AC	440
between the auxiliary contacts		V AC	440
Rated operational current		Α	
Conventional free air thermal current, 1 pole			
Open			
at 60 °C	I <sub>th</sub>	Α	16
AC-15			
220 V 230 V 240 V	I <sub>e</sub>	Α	6
380 V 400 V 415 V	I <sub>e</sub>	Α	4
500 V	I <sub>e</sub>	Α	1.5
DC current			
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
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)
Component lifespan			
at U <sub>e</sub> = 230 V, AC-15, 3 A	Operations	x 10 <sup>6</sup>	1.3
Short-circuit rating without welding			
max. fuse		A gG/gL	16
Rating data for approved types			
Auxiliary contacts			
Pilot Duty			
AC operated			A600
DC operated			P300
General Use			

## Design verification as per IEC/EN 61439

AC AC

DC

DC

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	4
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0.23
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature max.		°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.

٧

Α

٧

Α

600

15

250

1

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 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		Α	6	
Type of electric connection			Screw connection	
odel Top mounting				
Mounting method			Front fastening	

# 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.	3211-03
North America Certification	UL listed, CSA certified
Specially designed for North America	No

## **Additional product information (links)**

IL03407034Z (AWA2100-2251) Auxiliary contact	
IL03407034Z (AWA2100-2251) Auxiliary contact	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407034Z2010_10.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
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

http://www.moeller.net/binary/ver\_techpapers/ver960en.pdf