

Auxiliary contact module, 4 pole, I<sub>th</sub>= 16 A, 1 N/O, 3 NC, Front fixing, Push in terminals, DILA, DILM7 - DILM38



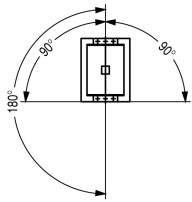
**Part no.** DILA-XHI13-PI  
**Catalog No.** 199320  
**Alternate Catalog No.** XTREXFABPI13

## Delivery program

Accessories				Auxiliary contact modules
Description				with interlocked opposing contacts
Function				for standard applications
Number of poles				4 pole
Connection technique				Push in terminals
<b>Rated operational current</b>				
Conventional free air thermal current, 1 pole				
Open				
at 60 °C	I <sub>th</sub>	A		16
AC-15				
220 V 230 V 240 V	I <sub>e</sub>	A		4
380 V 400 V 415 V	I <sub>e</sub>	A		4
<b>Contacts</b>				
N/O = Normally open				1 N/O
N/C = Normally closed				3 NC
Mounting type				Front fixing
Contact sequence				
For use with				DILA...-PI nicht mit DILA-22...(VDC) DILM7...(-PI) DILM8...-PI DILM9...(-PI) DILM11...-PI DILM12...(-PI) DILM14...-PI DILM15...(-PI) DILM17...(-PI) DILM25...(-PI) DILM32...(-PI) DILM38...(-PI) DILMP20...(-PI) DILMP32...(-PI) DILMP45...(-PI)
Type				Front mounting auxiliary contact
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

<b>General</b>				
Standards				IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical				
AC operated	Operations	x 10 <sup>6</sup>		10
DC operated	Operations	x 10 <sup>6</sup>		10
Component lifespan				
at U <sub>e</sub> = 230 V, AC-15, 3 A	Operations	x 10 <sup>6</sup>		1.3
Maximum operating frequency	Operations/h			9000
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
<b>Mounting position</b>		
Mounting position		
<b>Mechanical shock resistance (IEC/EN 60068-2-27)</b>		
Half-sinusoidal shock, 10 ms		
Basic unit with auxiliary contact module	g	
N/O contact	g	7
N/C contact	g	5
<b>Degree of Protection</b>		
Protection against direct contact when actuated from front (EN 50274)		Finger and back-of-hand proof
Weight	kg	0.05
<b>Terminal capacities</b>		
Push-in terminals		
Solid	mm <sup>2</sup>	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible	mm <sup>2</sup>	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible with ferrules	mm <sup>2</sup>	1 x (0,5 - 1,5) 2 x (0,5 - 1,5)
flexible with ultrasonic welded busbar end	mm <sup>2</sup>	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible with uninsulated wire end ferrule	mm <sup>2</sup>	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
Solid or stranded	AWG	20 - 14
Stripping length	mm	10
Standard screwdriver		3.0 x 0.5

## Contacts

Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5-1 Annex L)			yes
N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F)			DILM7 - DILM32
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	$U_i$	V AC	690
Rated operational voltage	$U_e$	V AC	500
<b>Safe isolation to EN 61140</b>			
between coil and auxiliary contacts		V AC	400
between the auxiliary contacts		V AC	400
<b>Rated operational current</b>			
Conventional free air thermal current, 1 pole			
at 60 °C	$I_{th}$	A	16
<b>AC-15</b>			
220 V 230 V 240 V	$I_e$	A	4
380 V 400 V 415 V	$I_e$	A	4
500 V	$I_e$	A	1.5
<b>DC current</b>			
Switch-on and switch-off conditions based on DC-13, time constant as specified.			
<b>DC L/R ≤ 15 ms</b>			
Contacts in series:			
1	24 V	A	10
1	60 V	A	6
2	60 V	A	10

1	110 V	A	3
3	110 V	A	6
1	220 V	A	1
3	220 V	A	5
DC L/R $\leq$ 50 ms			
Contacts in series:		A	
3	24 V	A	2.5
3	60 V	A	1
3	110 V	A	0.5
3	220 V	A	0.25
DC-13 (6xP)			
24 V	I <sub>e</sub>	A	2.5
60 V	I <sub>e</sub>	A	1
110 V	I <sub>e</sub>	A	0.5
220 V	I <sub>e</sub>	A	0.25
Control circuit reliability	Failure rate	$\lambda$	$<10^{-8}$ , < one failure at 100 million operations (at U <sub>e</sub> = 24 V DC, U <sub>min</sub> = 17 V, I <sub>min</sub> = 5.4 mA)
Short-circuit rating without welding			
Short-circuit protection maximum fuse			
500 V		A gG/gL	10
Current heat loss at I <sub>th</sub>			
AC operated		W	2.6
DC operated		W	2.6
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)		CO	0.16

### Rating data for approved types

Auxiliary contacts			
Pilot Duty			
AC operated			A600
DC operated			P300
General Use			
AC		V	600
AC		A	10
DC		V	250
DC		A	1

### Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60

### Technical data ETIM 8.0

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			3
Number of fault-signal switches			0
Rated operation current I <sub>e</sub> at AC-15, 230 V		A	4
Type of electric connection			Spring clamp connection
Model			Top mounting
Mounting method			Front fastening
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.		3211-03
North America Certification		UL listed, CSA certified
Specially designed for North America		No

## Dimensions

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## Additional product information (links)

Motor starters and "Special Purpose Ratings" for the North American market	<a href="http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf">http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf</a>
Switchgear of Power Factor Correction Systems	<a href="http://www.moeller.net/binary/ver_techpapers/ver934en.pdf">http://www.moeller.net/binary/ver_techpapers/ver934en.pdf</a>
X-Start - Modern Switching Installations Efficiently Fitted and Wired Securely	<a href="http://www.moeller.net/binary/ver_techpapers/ver938en.pdf">http://www.moeller.net/binary/ver_techpapers/ver938en.pdf</a>
Mirror Contacts for Highly-Reliable Information Relating to Safety-Related Control Functions	<a href="http://www.moeller.net/binary/ver_techpapers/ver944en.pdf">http://www.moeller.net/binary/ver_techpapers/ver944en.pdf</a>
Effect of the Cable Capacitance of Long Control Cables on the Actuation of Contactors	<a href="http://www.moeller.net/binary/ver_techpapers/ver949en.pdf">http://www.moeller.net/binary/ver_techpapers/ver949en.pdf</a>
Switchgear for Luminaires	<a href="http://www.moeller.net/binary/ver_techpapers/ver955en.pdf">http://www.moeller.net/binary/ver_techpapers/ver955en.pdf</a>
Standard Compliant and Functionally Safe Engineering Design with Mechanical Auxiliary Contacts	<a href="http://www.moeller.net/binary/ver_techpapers/ver956en.pdf">http://www.moeller.net/binary/ver_techpapers/ver956en.pdf</a>
The Interaction of Contactors with PLCs	<a href="http://www.moeller.net/binary/ver_techpapers/ver957en.pdf">http://www.moeller.net/binary/ver_techpapers/ver957en.pdf</a>
Busbar Component Adapters for modern Industrial control panels	<a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a>