# **DATASHEET - DILA-XHI22**



Auxiliary contact module, 4 pole, lth= 16 A, 2 N/O, 2 NC, Front fixing, Screw terminals, DILA, DILM7 - DILM38



Part no.	DILA-XHI22
Catalog No.	276426
Alternate Catalog	XTCEXFAC22
No.	
EL-Nummer	4130217
(Norway)	

### **Delivery program**

Description  with interfection optical disposition of the SMDT and are to be preferred. The Construction of the Const	benvery program			
Switching elements according uc H. SX01 and arcs to be prefered. The US operation contactur ULAC/S22 must any be continued out 3 -point analysis of the SX01 and arcs to be prefered. The US operation contactur ULAC/S22 must any be continued out 3 -point analysis of the SX01 and arcs to be prefered. The US operation contactur ULAC/S22 must any be continued out 3 -point and the SX01 and arcs to be prefered. The US operation contactur ULAC/S22 must any be continued out 3 -point and the SX01 and arcs to be prefered. The US operation contactur ULAC/S22 must any be continued out 3 -point and the SX01 and arcs to be prefered. The US operation contactur ULAC/S22 must any be continued out 3 -point and the SX01 and arcs to be prefered. The US operation contactur ULAC/S22 must any be continued out 3 -point and the SX01 and arcs to be prefered. The US operation contactur ULAC/S22 must any be contactur ULAC/S22 mu	Accessories			Auxiliary contact modules
Number of poles  4 pole    Convertional technique  Serve terminalis    Convertional tere at memory 1 pole	Description			Switching elements according to EN 50005 Version E combinations correspond to EN 50011 and are to be preferred. The DC operated contactor DILA(C)-22 must only be combined with 2-pole auxiliary
Connection technique    Serve terminals      Rated operational current    Delivery      Convertional fee air themals current, topia    Serve terminals      Open    In      Action    In <td>Function</td> <td></td> <td></td> <td>for standard applications</td>	Function			for standard applications
Rated operational current  Interference  Interference  Interference    Open  Interference  Interference  Interference    Open  Interference  Interference  Interference    200 V200 V30 V40 V15 V  Interference  Interference  Interference    200 V200 V30 V40 V15 V  Interference  Interference  Interference    NO = Normally open  Interference  2 NO    NO = Normally open  Interference  2 NO    NO = Normally open  Interference  Interference    Normally open  Interference  Interference    Normally open  Interference  Interference    Normally open  Interference  Inte	Number of poles			4 pole
Conventional free air thermal current, 1 pole  Image: 1 minute of the set of the	Connection technique			Screw terminals
Open      40 °C      40      16        AC-15	Rated operational current			
is 60 °C    is    is    is      AC-15    is    is    is    is      200 V200 V240 V4 00 V415 V    is	Conventional free air thermal current, 1 pole			
AC 15      Image: Contract Section Sectin Section Sectin Section Section Sectin Section Section Section Sec	Open			
220 V230 V240 V415V  Is  A  4    380 V400 V415V  Is  A  4    Contacts  Is  Is  A    N/G Hormally open  Is  Is  Is    N/G Hormally dosed  Is  Is  Is    N/G Hormally dosed  Is  Is  Is    Austing type  Is  Is  Is    Contacts sequence  Is  Is  Is    For use with  Is  Is  Is    Is  Is  Is    Is  Is  Is <td>at 60 °C</td> <td>I<sub>th</sub></td> <td>А</td> <td>16</td>	at 60 °C	I <sub>th</sub>	А	16
380 V 400 V 415 V    A    4      Contacts    V    A	AC-15			
Contacts    2400      NC = Normally open    2NC      Noce Normally closed    2NC      Mounting type    Fornt fixing      Contacts sequence $\frac{153}{161} \frac{61}{171} \frac{71}{183}$ For use with    DILAC()      DILMC(5    DILMC(5      DILMC(5	220 V 230 V 240 V	l <sub>e</sub>	А	4
N0 = Normally open      2 N0        NC = Normally closed      2 NC        Mounding type      Front fixing        Contact sequence      1 1 2 1 1 83        For use with      1 1 2 1 1 83        For use with      DLIA(C)        DLIA(C)      DLIA(C)	380 V 400 V 415 V	l <sub>e</sub>	А	4
NC = Normally closed      2 NC        Mounting type      Front fixing        Contact sequence	Contacts			
Muning type    Fort fixing      Contact sequence	N/O = Normally open			2 N/O
Contact sequence    Image: Contact sequence	N/C = Normally closed			2 NC
For use with    Image: Content of Combination      For use with    Image: Content of Combination      Type    For the content of Combination      Image: Content of Combination    Example of Content of Combination      Districtive number    Example of Content of Combination      Districtive number    Example of Content of Combination      Mith basic device    Example of Content of	Mounting type			Front fixing
Image: Section of combination    Image: Section of combination      Image: Section component    Section Section component      Image:	Contact sequence			
Instructions    Interlocked opposing contacts according to IEC/EN 60947-5-1 appendix L, inside thauxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open)      Code number and version of combination    Image: Comparison of Combination    Image: Comparison of Combination      Distinctive number    Image: Comparison of Combination    Image: Comparison of Combination    Image: Comparison of Combination      Image: With basic device    Image: Comparison of Combination    Image: Comparison of Combination    Image: Comparison of Combination      Image: With basic device    Image: Comparison of Combination    Image: Comparison of Combination    Image: Comparison of Combination      Image: With basic device    Image: Comparison of Combination    Image: Comparison of Combination    Image: Comparison of Combination      Image: With basic device    Image: Comparison of Combination    Image: Comparison of Combination    Image: Comparison of Combination      Image: With basic device    Image: Comparison of Combination    Image: Comparison of Combination    Image: Comparison of Combination      Image: With basic device    Image: Comparison of Combination    Image: Comparison of Combination    Image: Comparison of Combination      Image: With basic device    Image: Comparison of Combination    Image: Comparison of Combination    Image: Comparison of Combination	For use with			DILM(C)7 DILM(C)9 DILM(C)12 DILM(C)17 DILM(C)25 DILM(C)25 DILM(C)32 DILM(C)32 DILMP20 DILMP20 DILMP32 DILMP45 DILMF14 DILMF17 DILMF17 DILMF17 DILMF17 DILMF17
Code number and version of combination    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      Distinctive number    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)      with basic device    Marking contacts used as mirror contacts according to IEC/EN 60947-4-1 Append F (not N/C late open)	Туре			Front mounting auxiliary contact
Distinctive number  62E    with basic device  DILA(C)-40    with basic device  53    with basic device  DILA(C)-31	Instructions			Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix
with basic device  DILA(C)-40    with basic device  53    DILA(C)-31	Code number and version of combination			
with basic device  Image: Constraint of the second	Distinctive number			62E
with basic device DILA(C)-31	with basic device			DILA(C)-40
				53
44	with basic device			DILA(C)-31
				44

with	basic	device	

DILA(C)-22

#### Technical data General

General			
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
Mounting position		-	
Mounting position			-
Mechanical shock resistance (IEC/EN 60068-2-27)			
Half-sinusoidal shock, 10 ms			
Basic unit with auxiliary contact module		g	
N/O contact		g	7
N/C contact		g	5
Degree of Protection			IP20
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Weight		kg	0.049
Terminal capacities		mm <sup>2</sup>	
		mm	
Screw terminals			
Solid		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Flexible with ferrule		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Solid or stranded		AWG	18 - 14
Terminal screw			M3.5
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	0.8 x 5.5 1 x 6
Max. tightening torque		Nm	1.2
Contacts			
Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5- 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 <sub>imp</sub>	V AC	6000
Overvoltage category/pollution degree			111/3
Rated insulation voltage	Ui	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	400
between the auxiliary contacts		V AC	400
Rated operational current		A	
חמוכט טוטרומו לעורפות		А	

Conventional free air thermal current, 1 pole			
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	l <sub>e</sub>	A	4
500 V	l <sub>e</sub>	A	1.5
DC current	-e		
			Switch-on and switch-off conditions based on DC-13, time constant as specified.
DC L/R ≦ 15 ms			
Contacts in series:		A	
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 ≦ 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	А	0.25
DC-13 (6xP)			
24 V	۱ <sub>e</sub>	А	2.5
60 V	Ι <sub>e</sub>	А	1
110 V	le	A	0.5
220 V	I <sub>e</sub>	A	0.25
Control circuit reliability	Failure rate	λ	<10 <sup>-8</sup> , < 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		Α	1

# Design verification as per IEC/EN 61439

· ·			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	4
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0.16
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0

Heat dissipation capacity	P <sub>diss</sub>	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)

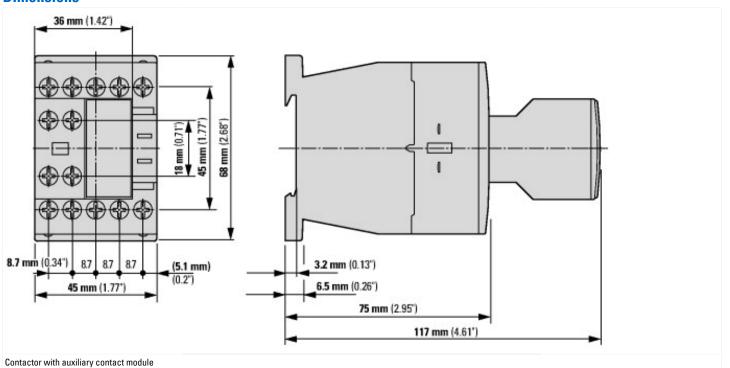
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss10.0.1-27-37-13-02 [AKN342013])

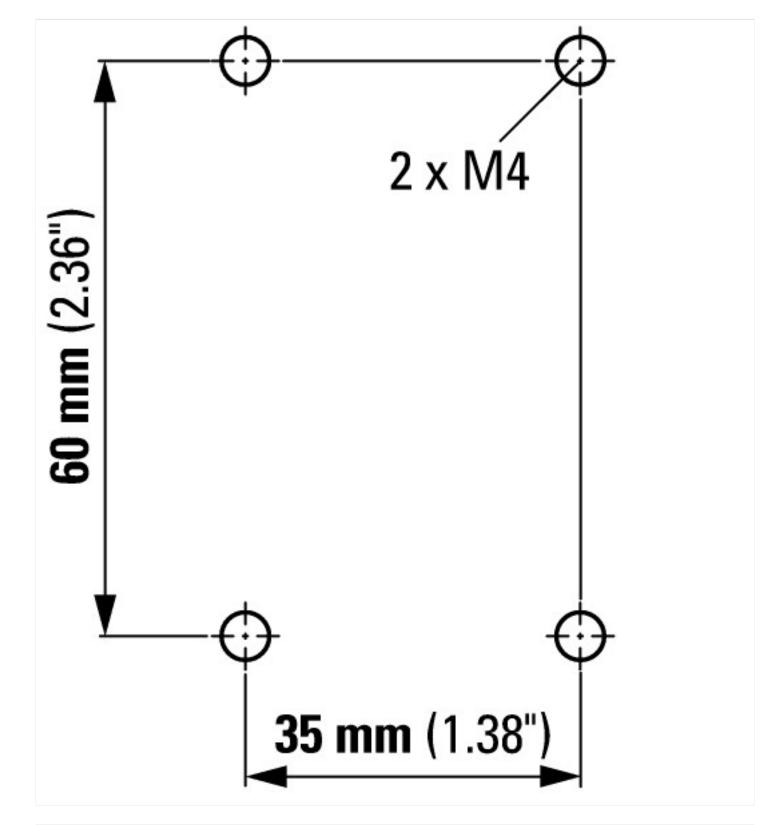
Number of contacts as change-over contact		0
Number of contacts as normally open contact		2
Number of contacts as normally closed contact		2
Number of fault-signal switches		0
Rated operation current le at AC-15, 230 V	А	4
Type of electric connection		Screw connection
Model		Top mounting
Mounting method		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**





# 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