## DATASHEET - DILA-XHI02



Auxiliary contact module, Front mounting auxiliary contact, 2 pole, 380 V 400 V 415 V: 4 A, 2 NC, Front fixing, Screw terminals



Part no.	DILA-XHI02
Catalog No.	276420
Alternate Catalog	XTCEXFAC02
No.	
EL-Nummer	4130212
(Norway)	

### **Delivery program**

Description   white implicit appoint control     Function   implicit appoint control     Number of poles   2 pole     Control to the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the pole function is the high of the control to the high of the high of the control to the high of t	Derivery program			
Switching elements according to EV SUBS Vision Contractor Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sector Sect	Accessories			Auxiliary contact modules
Number of poles   2 pole     Converticional test in themal current 1 pole   image: pole     Open   image: pole     Actio   image: 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 traininds     Rated operational current   pole     Operational free air themas current, pole   Image: Connection technique     Operational free air themas current, pole   Image: Connection technique     Sol Valo Valo Valo Valo Valo Valo Valo Va	Function			for standard applications
Rated operational current   Image: Part of the second part of	Number of poles			2 pole
Conventional free air themal current, 1 pole   Image: 1 minute of the second se	Connection technique			Screw terminals
Open at 60 °C       No       A       Image: Contract section of combination       Image: Combination of	Rated operational current			
is 60 °C     Is	Conventional free air thermal current, 1 pole			
AC-15       A       A         220 V 220 V 240 V       Is       A       4         380 V 400 V 115 V       Is       A       4         Contacts       Is       Is       Is       Is         NC = Normally closed       Is       Is       Is       Is         Monting type       Is       Is       Is       Is       Is         Contact sequence       Is	Open			
220 V 230 V 240 V 415 V     In     A     4       300 V 400 V 415 V     In     A     4       Contacts     NG = Normaly closed     In     A     Ford frame       NG = Normaly closed     In     In     In     In     In       Mounting type     In     In     In     In     In     In       Contacts sequence     In     <	at 60 °C	I <sub>th</sub>	А	16
380 V 400 V 415 V     A     A       Contacts     VC = Normally closed     VC = Normally closed     VC = Normally closed       Mouting type     Contacts sequence     Image: Sequence     Image: Sequence     Image: Sequence       For use with     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       For use with     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       For use with     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       For use with     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       For use with     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       For use with     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       For use with     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       For use with     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       Type     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence     Image: Sequence       Type	AC-15			
Contacts     Image: Contact sequence     Im	220 V 230 V 240 V	l <sub>e</sub>	А	4
NC = Normally closed       IC       IC         Mounting type       Front fixing       Front fixing         Contact sequence       IS1 1 61 -J-J-J-J       IS1 1 61 -J-J-J-J       IS1 1 61 -J-J-J-J         For use with       IDA(C)       IDA(C)       IDA(C)         IDA(C)       IDA(C)       IDA(C)       IDA(C) <t< td=""><td>380 V 400 V 415 V</td><td>l<sub>e</sub></td><td>А</td><td>4</td></t<>	380 V 400 V 415 V	l <sub>e</sub>	А	4
Mounting type     Fort fixing       Contact sequence     151 161       Jack Contact sequence     151 161       Jack Contact sequence     151 161       Jack Contact sequence     151 161       For use with     DILA(C)       DILM(C)     DILM(C)	Contacts			
Contact sequence     Image: Single Si	N/C = Normally closed			2 NC
For use with     Image:	Mounting type			Front fixing
DILM(C)7 DILM(C)12 DILM(C)15 DILM(C)15 DILM(C)15 DILM(C)25 DILM(C)25 DILM(C)25 DILM(C)25 DILM(C)25 DILM(S22 DILMS2 DILMS2 DILMS2 DILMS2 DILMS2 DILMS2 DILMS2TypeFront mounting auxiliary contactInstructionsFront mounting auxiliary contacts according to IEC/EN 60947-5-1 appendix L, inside the DILM 2003 DILMS2Code number and version of combinationImage and a main an				- <b>7</b> -7 52 62
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)	For use with			DILM(C)7 DILM(C)9 DILM(C)12 DILM(C)15 DILM(C)17 DILM(C)25 DILM(C)25 DILM38 DILM38 DILM792 DILM792 DILM793 DILMF14 DILMF11 DILMF14 DILMF17 DILMF17 DILMF17
Code number and version of combination     auxiliary contacts according to IEC/EN 60947-4-1 Appendix	Туре			Front mounting auxiliary contact
	Instructions			Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix
Distinctive number 42 E	Code number and version of combination			
	Distinctive number			42 E

with basic device	DILA(C)-40
	33
with basic device	DILA(C)-31
	24
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	0.038
Terminal capacities		mm <sup>2</sup>	
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)	1		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			III/3
Rated insulation voltage	Ui	V AC	690
Rated operational voltage	U <sub>e</sub>	V AC	500

Safe isolation to EN 61140			
		V AC	400
between coil and auxiliary contacts			400
between the auxiliary contacts		V AC	400
Rated operational current		A	
Conventional free air thermal current, 1 pole		٨	10
at 60 °C	I <sub>th</sub>	A	16
AC-15			
220 V 230 V 240 V	l <sub>e</sub>	A	4
380 V 400 V 415 V	le	A	4
500 V	l <sub>e</sub>	А	1.5
DC current			
			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	А	10
1	60 V	Α	6
2	60 V	А	10
1	110 V	А	3
3	110 V	Α	6
1	220 V	А	1
3	220 V	А	5
DC L/R ≦ 50 ms			
Contacts in series:		А	
3	24 V	Α	2.5
3	60 V	А	1
3	110 V	А	0.5
3	220 V	А	0.25
DC-13 (6xP)			
24 V	le	А	2.5
60 V	le	А	1
110 V	I <sub>e</sub>	А	0.5
220 V	le	А	0.25
Control circuit reliability	Failure rate	λ	<10 <sup>-8</sup> , < one failure at 100 million operations
			<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 $\rm I_{e}$ (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		А	10
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	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)

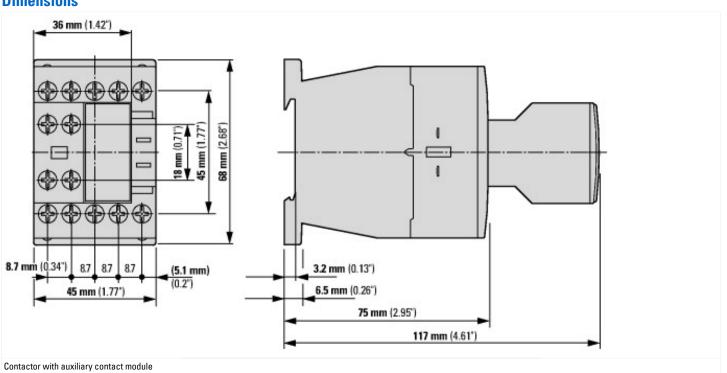
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss10.0.1-27-37-13-02 [AKN342013])

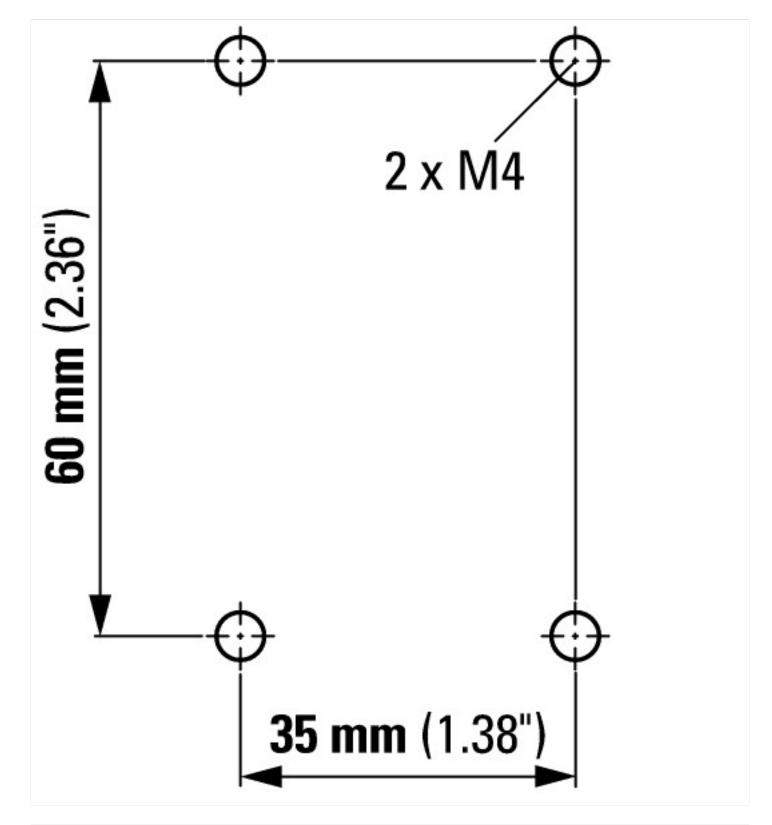
Number of contacts as change-over contact		0
Number of contacts as normally open contact		0
Number of contacts as normally closed contact		2
Number of fault-signal switches		0
Rated operation current le at AC-15, 230 V	А	4
Type of electric connection		Screw connection
Model		Top mounting
Mounting method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

## **Dimensions**





## Assets (links)

Declaration of CE Conformity 00002885 Instruction Leaflets IL03407013Z2018\_07