

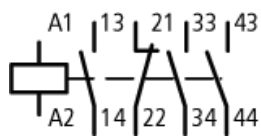
Type: **DILA-31(230V50HZ,240V60HZ)**
 Article No.: **276364**



Ordering information

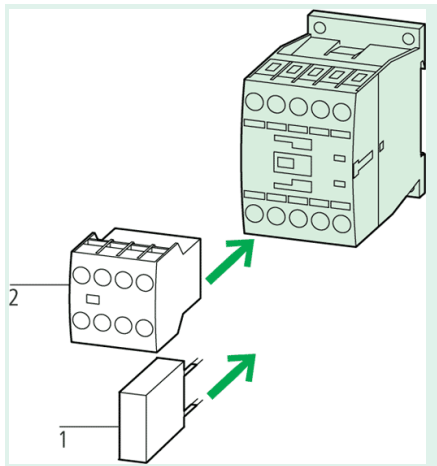
Connection technique			Screw terminals
Contacts M = Make			3 M
Contacts B = Break			1 B
Rated operational current AC-15 220 V 230 V 240 V	I_e	A	6
Rated operational current AC-15 380 V 400 V 415 V	I_e	A	4
Conventional current, open at 60 °C	I_{th}	A	10
Distinctive number and version of combination DILA(C)-31			31E
Can be combined with auxiliary contact module			DILA-XHI(V)...

Contact sequence



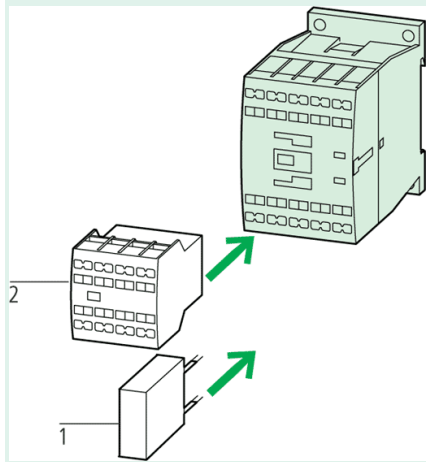
Notes concerning the product group

With screw terminals:



Accessories	Page
1 Suppressor	→ 281208
2 Auxiliary contact module	→ 276420
Further actuating voltages	→ 276315

With springloaded terminals:



Accessories	Page
1 Suppressor	→ 281208
2 Auxiliary contact module	→ 276420
Further actuating voltages	→ 276315

Contact numbers to EN 50011

Coil terminal markings to EN 50005

DC operated contactor relays have a built-in suppressor circuit.

General

Standards			IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	$\times 10^6$	20
DC operated	Operations	$\times 10^6$	20
Maximum operating frequency			

Maximum operating frequency	Operations/h		9000
Climatic proofing			Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclic, to IEC 60068-2-30
Climatic proofing			Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclical, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25/60
Enclosed		°C	-25/40
Ambient temperature, Storage		°C	-40/80
Mounting position			
Mechanical shock resistance (IEC/EN 60068-2-27)			
Half-sinusoidal shock, 10 ms			
Basic unit with auxiliary contact module			
Make contact		g	7
Break contact		g	5
Protection type			IP20
Protection against direct contact when actuated from front (IEC 536)			Finger- and back-of-hand proof
Weight			
AC operated		kg	0.23
DC operated		kg	0.28
Terminal capacities			
Screw terminals			
Solid		mm ²	1 × (0,75 – 2,5) 2 × (0,75 – 2,5)
Flexible with ferrule		mm ²	1 × (0,75 – 2,5) 2 × (0,75 – 2,5)
Solid or stranded		AWG	18 – 14
Terminal screw			M3.5
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	0.8 × 5.5 1 × 6
max. tightening torque		Nm	1,2
Spring loaded terminals			
Solid		mm ²	1 × (0,75 – 2,5) 2 × (0,75 – 2,5)
Flexible with or without ferrule DIN 46228		mm ²	1 × (0,75 – 2,5) 2 × (0,75 – 2,5)
Solid or stranded		AWG	18 – 14
Standard screwdriver		mm	0.6 × 3.5
Contacts			
Interlocked opposing contacts to ZH 1/457, including auxiliary contact module			Yes
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	690

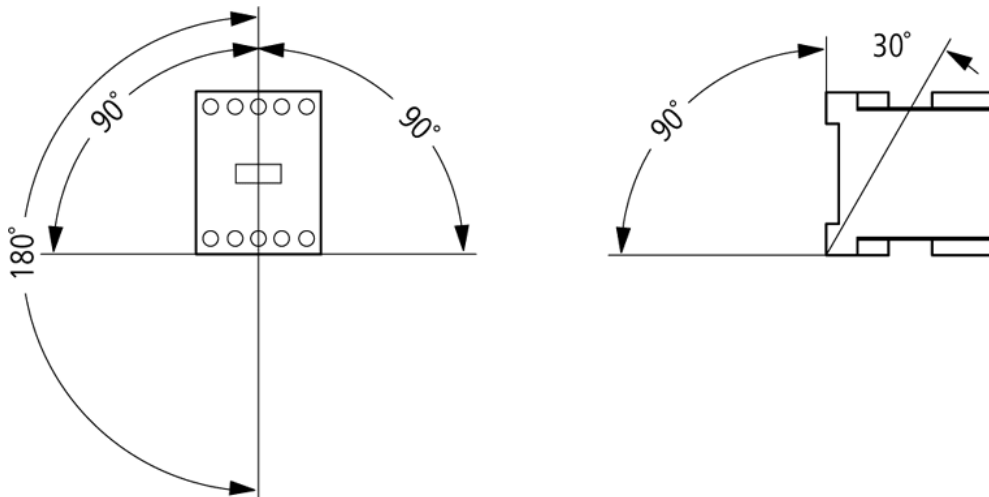
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between coil and auxiliary contacts		V AC	400
between the auxiliary contacts		V AC	400
Rated operational current			
AC-15			
220/240 V	I_e	A	6
380/415 V	I_e	A	4
500 V	I_e	A	1,5
DV-13			
DC-13 L/R f 15 ms			
Contacts in series:			
1	24 V	A	2,5
1	60 V	A	1
2	60 V	A	3
1	110 V	A	0,5
3	110 V	A	3
1	220 V	A	0,25
3	220 V	A	1
DC-13 L/R f 50 ms			
Contacts in series:			
3	24 V	A	4
3	60 V	A	4
3	110 V	A	2
3	220 V	A	1
Control circuit reliability (at $U_e = 24$ V DC, $U_{min} = 17$ V, $I_{min} = 5.4$ mA)	Failure rate	»	-8, < one failure at 100 million operations
Conventional thermal current	I_{th}	A	10
Component lifespan at $U_e = 240$ V			
Short-circuit rating without welding			
Maximum overcurrent protective device			
220/240 V		PKZM0	4
380/415 V		PKZM0	4
Short-circuit protection Maximum fuse			
500 V		A gG/gL	10
Current heat loss at I_{th}			
AC operated		W	0,3
DC operated		W	0,3
Magnet systems			
Voltage tolerance			
AC operated			
Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz	Pick-up	$\times U_s$	0,8 – 1,1
Dual-frequency coil 50/60 Hz	Pick-up	$\times U_s$	0,8 – 1,1
DC operated			

Pick-up voltage	Anzug	$\times U_s$	0,8 – 1,1
Without auxiliary contact module (40 °C)	Pick-up	$\times U_c$	0,7 – 1,3
Power consumption			
Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz	Pick-up	VA	24
Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz	Pick-up	W	19
Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz	Sealing	VA	4
Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz	Sealing	W	1,2
Dual-frequency coil 50/60 Hz at 50 Hz	Pick-up	VA	28
Dual-frequency coil 50/60 Hz at 50 Hz	Pick-up	W	22
Dual-frequency coil 50/60 Hz at 50 Hz	Sealing	VA	4,6
Dual-frequency coil 50/60 Hz at 50 Hz	Sealing	W	1,4
Dual-frequency coil 50/60 Hz at 60 Hz	Pick-up	VA	26
Dual-frequency coil 50/60 Hz at 60 Hz	Pick-up	W	21
Dual-frequency coil 50/60 Hz at 60 Hz	Sealing	VA	3,9
Dual-frequency coil 50/60 Hz at 60 Hz	Sealing	W	1,2
DC operated	Pull-in = sealing	W	3
Duty factor		% DF	100
Switching times at 100 % U_c (approximate values)			
AC operated Closing delay		ms	20
AC operated Make contact Opening delay		ms	15
DC operated Closing delay		ms	35
DC operated Make contact Opening delay		ms	15

Notes

Making and breaking conditions to DC-13, time constant as stated
 See transparent overlay "Fuses" for time/current characteristics (please enquire)
 Smoothed DC or three-phase bridge rectifier

Mounting position



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