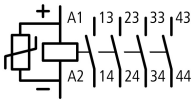
Contactor relay,4M/0Oe,DC-operated

Part no. **DILA-40(24VDC)**

Article no. **276344**

Delivery programme

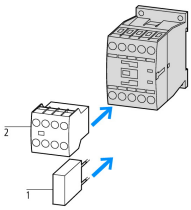
Actuating voltage			24 V DC
Connection technique			Screw terminals
Voltage AC/DC			DC operation
Contacts			
N/O = Normally open			4 N/O
Rated operational current			
AC–15			
220 V 230 V 240 V	I_e	A	4
380 V 400 V 415 V	I_e	A	4
Conventional thermal current	I_{th}	A	16
Code number			
			40E
Can be combined with auxiliary contact module			DILA-XHI(V)...
Contact sequence			

Notes

Interlocked opposing contacts

Notes

With screw terminals:

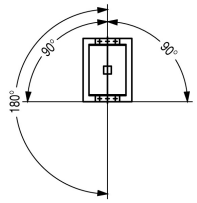


Accessory **Page**

1 Suppressor
2 Auxiliary contact module
Contact numbers to EN 50011
Coil terminal markings to EN 50005
The DC operated contactors have a built-in suppressor circuit.

General

Standards			IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	× 10^6	20
DC operated	Operations	× 10^6	20
Maximum operating frequency		Ops./h	
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		°C	
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
Protection type			IP 20
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		mm^2	
Screw terminals			
Solid		mm^2	1 × (0,75 – 4) 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 – 1.5) 2 × (0,75 – 1.5)
Solid or stranded		AWG	18 – 14
Standard screwdriver		mm	0.6 × 3.5

Contacts

Positive operating 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	I_e	A	
AC–15			
220/240 V	I_e	A	4
380/415 V	I_e	A	4
500 V	I_e	A	1.5
DC-13			
DC-13 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

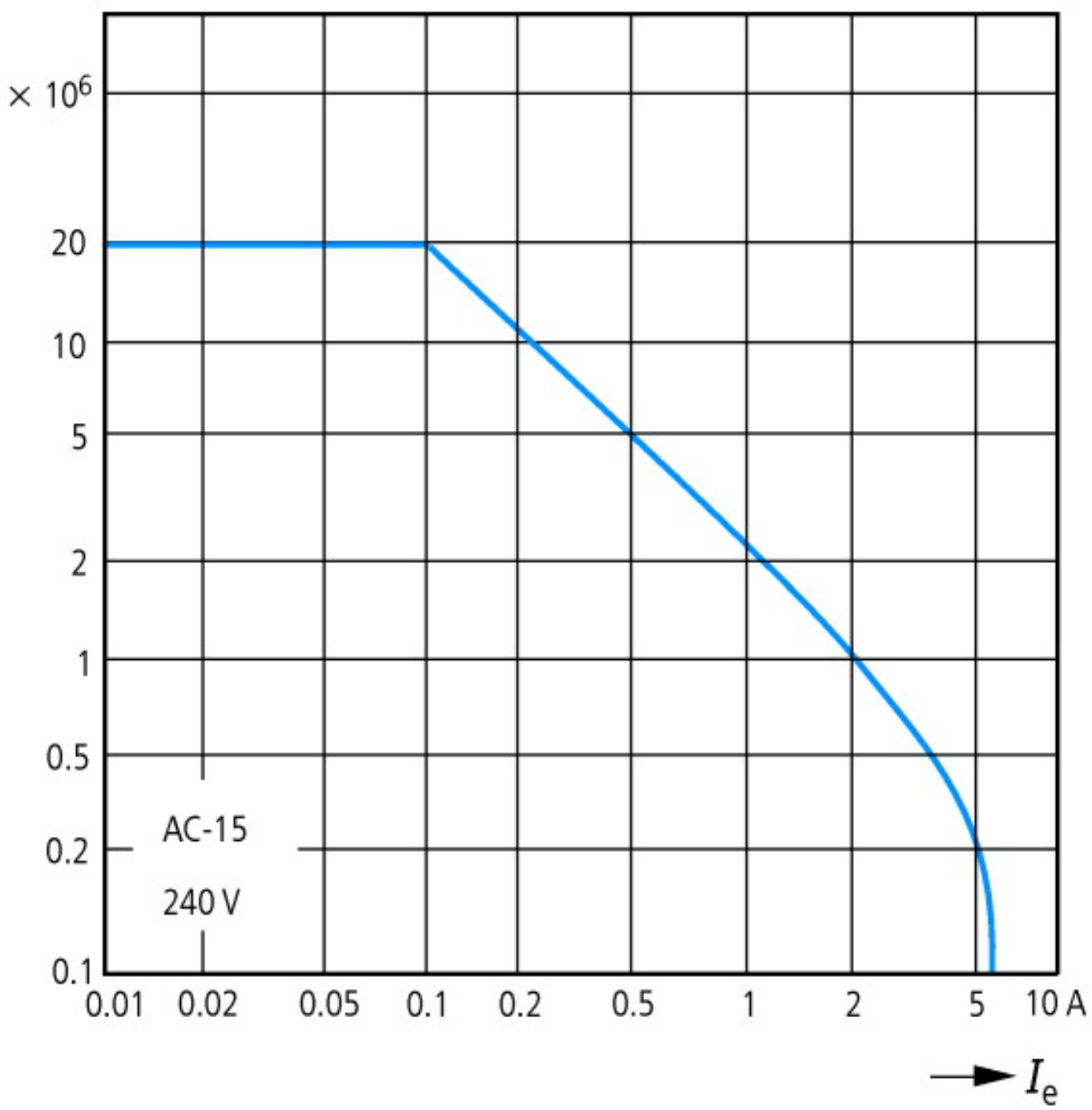
3	110 V	A	6
1	220 V	A	1
3	220 V	A	5
DC-13 L/R – 50 ms			
Contacts in series:		A	
3	24 V	A	4
3	60 V	A	4
3	110 V	A	2
3	220 V	A	1
Control circuit reliability (at U_e = 24 V DC, U_{min} = 17 V, I_{min}= 5.4 mA)	Failure rate	λ	$<10^{-8}$, < one failure at 100 million operations
Conventional thermal current	I_{th}	A	16
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

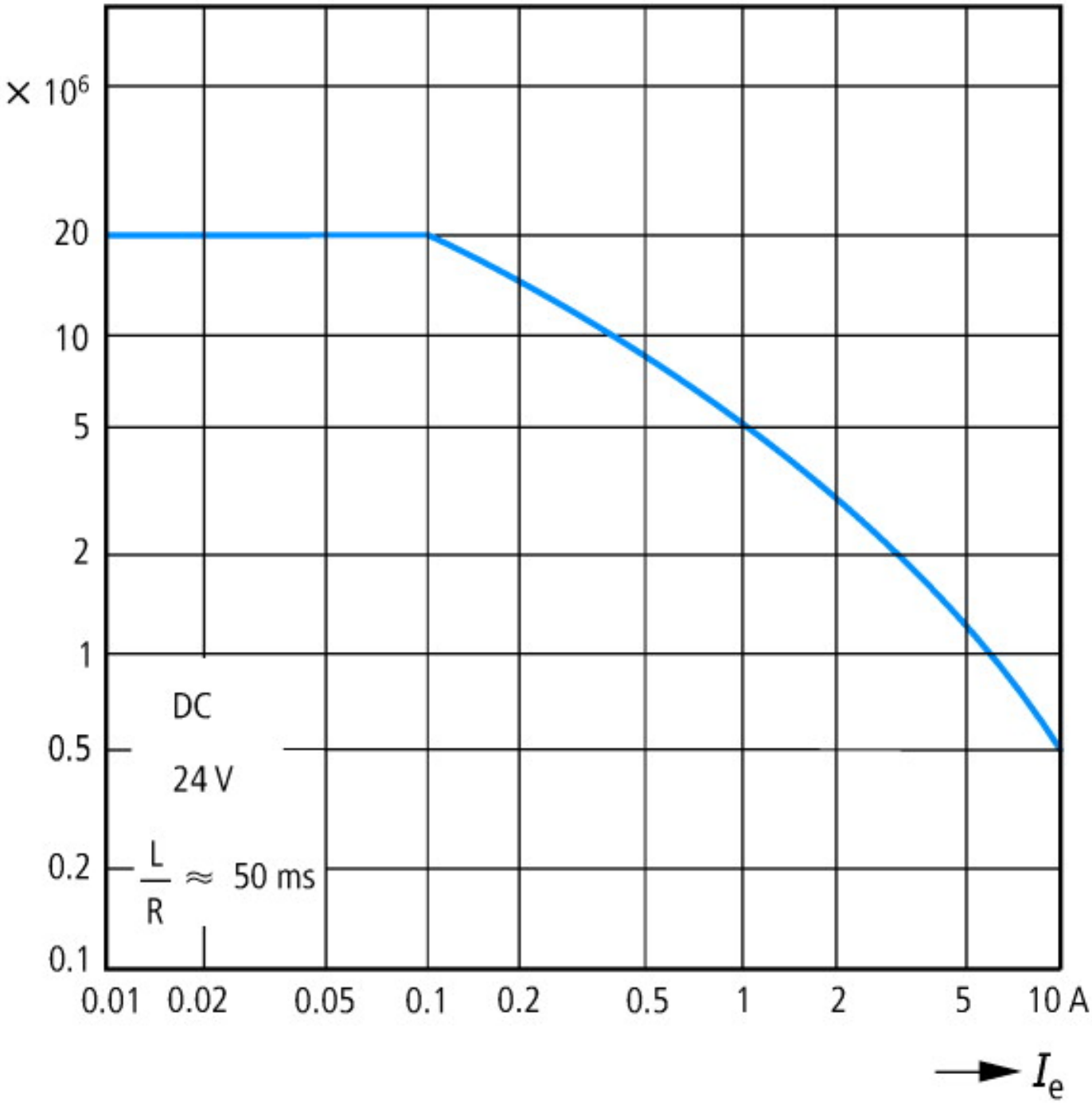
Voltage tolerance		× U_c	
AC operated		× U_c	
	Pick-up	× U_c	0.8 – 1.1
DC operated		× U_c	
	Pick-up	× U_c	0.8 – 1.1
at 24 V: without auxiliary contact component (40 °C)	Pick-up	× U_c	0.7 – 1.3
Power consumption			
50 Hz	Pick-up	VA	24
50 Hz	Sealing	VA	3.4
50 Hz	Sealing	W	1.2
60 Hz	Pick-up	VA	30
60 Hz	Sealing	VA	4.4
60 Hz	Sealing	W	1.4
50/60 Hz	Pick-up	VA	27 25
50/60 Hz	Sealing	VA	4.2 3.3
50/60 Hz	Sealing	W	1.4 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	15 – 21
AC operated N/O contact opening delay		ms	9 – 18
DC operated closing delay		ms	
Switching times, DC operated, max. closing delay		ms	31
DC operated N/O contact opening delay		ms	
Switching times, DC actuated make contact Opening delay, max.		ms	12

Notes

Notes Making and breaking conditions to DC-13, time constant as stated
See transparent overlay "Fuses" for time/current characteristics (please enquire)
Use only equal cross-sections

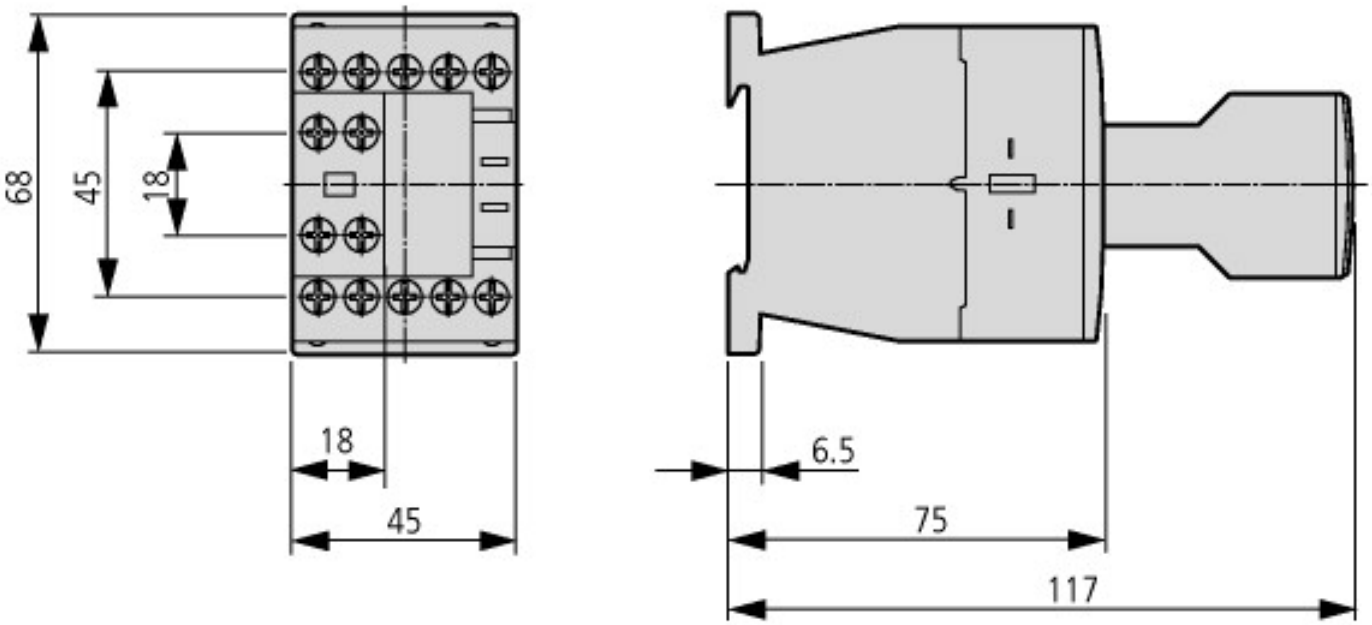


Component lifespan (operations)
Ie = Rated operational current



Component lifespan (operations)
Ie = Rated operational current

Dimensions



Additional product information (links)

Installation instructions	
AWA2100-2126 Contactors	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/21261207.pdf