## DATASHEET - DILM185A/22(RAC500)



Contactor, 380 V 400 V 90 kW, 2 N/O, 2 NC, RAC 500: 480 - 500 V 50/60 Hz, AC operation, Screw connection



Part no. DILM185A/22(RAC500)

Catalog No. 139539

Alternate Catalog XTCE185H22C

No.

**EL-Nummer** 4134279

(Norway)

(Norway)			
Delivery program			
Product range			Contactors
Application			Contactors for Motors
Subrange			Standard devices greater than 170 A
Utilization category			AC-1: Non-inductive or slightly inductive loads, resistance furnaces NAC-3: Normal AC induction motors: starting, switch off during running AC-4: Normal AC induction motors: starting, plugging, reversing, inching
Connection technique			Screw connection
Rated operational current			
AC-3			
380 V 400 V	I <sub>e</sub>	Α	185
AC-1			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	I <sub>th</sub> =I <sub>e</sub>	Α	337
enclosed	I <sub>th</sub>	Α	245
Conventional free air thermal current, 1 pole			
open	I <sub>th</sub>	Α	685
enclosed	I <sub>th</sub>	Α	625
Max. rating for three-phase motors, 50 - 60 Hz			
AC-3			
220 V 230 V	Р	kW	55
380 V 400 V	P	kW	90
660 V 690 V	P	kW	140
1000 V	P	kW	108
AC-4			
220 V 230 V	P	kW	41
380 V 400 V	P	kW	75
660 V 690 V	P	kW	102
1000 V	Р	kW	77
Contact sequence			A1 1 1 3 5 13 21 31 43 A2 2 4 6 14 22 32 44
Can be combined with auxiliary contact			DILM1000-XHI
Actuating voltage			RAC 500: 480 - 500 V 50/60 Hz
Voltage AC/DC			AC operation
Contacts			
N/O = Normally open			2 N/O
N/C = Normally closed			2 NC
Auxiliary contacts			
possible variants at auxiliary contact module fitting options			on the side: 2 x DILM1000-XHI(V)11-SI; 2 x DILM1000-XHI11-SA
Side mounting auxiliary contacts			DILM1000 XHI(V)11-SI
Instructions			Interlocked opposing contacts according to IEC/EN 60947-5-1 Appendix L, inside the auxiliary contact module

	Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open)
Instructions	integrated suppressor circuit in actuating electronics 660 V, 690 V or 1000 V: not directly reversing

#### Technical data General

Standards			IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	x 10 <sup>6</sup>	10
Operating frequency, mechanical			
AC operated	Operations/h		3000
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
Storage		°C	- 40 - + 80
Mounting position			30'
Mechanical shock resistance (IEC/EN 60068-2-27)			
Half-sinusoidal shock, 10 ms			
Main contacts			
N/O contact		g	10
Auxiliary contacts			
N/O contact		g	10
N/C contact		g	8
Degree of Protection			IP00
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof with terminal shroud or terminal block
Altitude		m	Max. 2000
Weight			
AC operated		kg	3.54
DC operated		kg	3.54
Weight		kg	3.54
Terminal capacity main cable  Flexible with cable lug		2	50 - 185
<u> </u>		mm <sup>2</sup>	
Stranded with cable lug		mm <sup>2</sup>	50 - 185
Solid or stranded		AWG	1/0 - 350 MCM
Flat conductor	Lamellenzahl x Breite x Dicke	mm	Fixing with flat cable terminal or cable terminal blocks See terminal capacity for cable terminal blocks
Busbar	Width	mm	32
Main cable connection screw/bolt			M10
Tightening torque		Nm	24
Terminal capacity control circuit cables			
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
Control circuit cable connection screw/bolt			M3.5
Tightening torque		Nm	1.2
Tool			
Main cable			

Page	Width across flats		mm	16
Main conduction gaths Near invalue of wilder of vision Near invalue of wilder of wilder Near invalue of w	Control circuit cables			
New Processing of color col	Pozidriv screwdriver		Size	2
Power state part ploutplotted requeres	Main conducting paths			
Rance of permission voltages         U, V AC         VAC         100           Rance of permission voltages         4, V AC         100           Becommend of the Silv 19         500         500           Becommend of contacts         4, V AC         200           Browning expector, 10 to BECN 1998 (7)         4, V AC         200           Browning expector, 10 to BECN 1998 (7)         4, V AC         200           250 V 450 V         4, V AC         200           350 V 450 V <td>Rated impulse withstand voltage</td> <td>U<sub>imp</sub></td> <td>V AC</td> <td>8000</td>	Rated impulse withstand voltage	U <sub>imp</sub>	V AC	8000
Rise continuo ne 191100         V. III.	Overvoltage category/pollution degree			III/3
Sele solution 12 Michigan	Rated insulation voltage	Ui	V AC	1000
between teconictics         VAC         500           Nativaling cannot pet in InCENT 685471         4         200           Breaking capacity         2         2           220 V20 V         A         256           560 V 400 V         A         250           500 V         A         A         250           500 V         A         A         150 Very Proprietric Carrier           500 V         A         A         150 Very Proprietric Carrier         A         150 Very Propr	Rated operational voltage	U <sub>e</sub>	V AC	1000
Making capachy is fit is ECRN 08477   A 2 20 20 20 20 20 20 20 20 20 20 20 20 2	Safe isolation to EN 61140			
Making capachy (n. 1 HE ECR MB47)	between coil and contacts		V AC	500
Breaking capacity/         200	between the contacts		V AC	500
200 V 300 V	Making capacity (p.f. to IEC/EN 60947)		Α	2700
Seg V 490 V	Breaking capacity			
\$100 V	220 V 230 V		Α	2250
660 V 890 V	380 V 400 V		Α	2250
Component lifespan	500 V		Α	2250
Component lifespan         AC1: See → Engineering, characteristic curves           Short-circult rating         AC1: See → Engineering, characteristic curves           Short-circult protection maximum fuse         AC1: See → Engineering, characteristic curves           Type 72: coordination         GG(gL 500 V A DISC)         315           400 V         GG(gL 500 V A DISC)         400           Type 71: coordination         GG(gL 500 V A DISC)         400           400 V         GG(gL 500 V A DISC)         400           660 V         GG(gL 500 V A DISC)         400           FRE44 Operational current         GG(gL 500 V A DISC)         400           Conventional for ear thermal current, 3 pole, 50 - 80 Hz         400         400           Open         In =	660 V 690 V		Α	2250
ACL See ** Engineering, characteristic curves	1000 V		Α	760
Short-circuit rating	Component lifespan			
Short-circuit protection maximum fuse   Type "2" coordination   400 V   90 (gL 500 V   A   315   250   1000 V   90 (gL 500 V   A   160   1000 V				AC3: See → Engineering, characteristic curves
Type "2" coordination  400 V 650 V 650 V 650 S 1000 V 7 Per 1" coordination  400 V 650 V 650 V 650 S 500 V 650 S 650 S 650 V 650 S 650 V 650 S	Short-circuit rating			
400 V   96/9L 500 V   A   315	Short-circuit protection maximum fuse			
G90 V   G6/gL 690 V   A   250	Type "2" coordination			
1000 V   1000 V   26/gL 1000 V   A   160	400 V	gG/gL 500 V	Α	315
Type "1" coordination         gG/gL 500 V         A         400           690 V         gG/gL 500 V         A         315           1000 V         gG/gL 1000 V         A         200           AC-1           Rated operational current         Conventional free air thermal current, 3 pole, 50 - 60 Hz	690 V	gG/gL 690 V	Α	250
400 V   06/9L 500 V   A   315     1000 V   06/9L 500 V   A   315     1000 V   200     AC-1	1000 V	gG/gL 1000 V	Α	160
690 V   600	Type "1" coordination			
Note	400 V	gG/gL 500 V	Α	400
AC-1  Rated operational current  Conventional free air thermal current, 3 pole, 50 - 60 Hz  Open  at 40 °C  at 50 °C  len = le  at 60 °C  enclosed  Notes  Conventional free air thermal current, 1 pole  Note  open  enclosed  Note  Open  len  len  len  len  A  at maximum permissible ambient air temperature  at maximum permissible ambient air temperature  At maximum permissible ambient air temperature  AC-3  Rated operational current  Open, 3-pole: 50 - 60 Hz  Notes  AC-3  Rated operational current  Open, 3-pole: 50 - 60 Hz  Notes  220 V 230 V  len  len  A maximum permissible ambient air temperature  At maximum permissible ambient air temperature (open.)  At maximum permissible ambient temperature (open.)	690 V	gG/gL 690 V	Α	315
AC-1  Rated operational current  Conventional free air thermal current, 3 pole, 50 - 60 Hz  Open  at 40 °C  l <sub>m</sub> = l <sub>0</sub> A  337  at 50 °C  l <sub>m</sub> = l <sub>0</sub> A  287  at 60 °C  l <sub>m</sub> = l <sub>0</sub> A  275  enclosed  Notes  Conventional free air thermal current, 1 pole  Note  Open  AC-3  Rated operational current  Open, 3-pole: 50 - 60 Hz  Notes  AC-3  Rated operational current  Open, 3-pole: 50 - 60 Hz  Notes  A maximum permissible ambient air temperature  At maximum permissible ambient temperature (open.)		gG/gL 1000 V	Α	200
Conventional free air thermal current, 3 pole, 50 - 60 Hz         lth = le A 337           at 40 °C at 50				
Open         Ith =Ie         A         337           at 50 °C         Ith =Ie         A         301           at 55 °C         Ith =Ie         A         287           at 60 °C         Ith =Ie         A         275           enclosed         Ith         A         245           Notes         At maximum permissible ambient air temperature.         At maximum permissible ambient air temperature           Open         Ith         A         685           enclosed         Ith         A         625           AC-3         Rated operational current         Open, 3-pole: 50 − 60 Hz         At maximum permissible ambient temperature (open.)           Notes         At maximum permissible ambient temperature (open.)         At maximum permissible ambient temperature (open.)	Rated operational current			
In   In   In   In   In   In   In   In	Conventional free air thermal current, 3 pole, 50 - 60 Hz			
at 50 °C  lth = le A 301  at 55 °C  lth = le A 287  at 60 °C  lth = le A 275  enclosed  lth A 245  Notes  Conventional free air thermal current, 1 pole  Note  nopen lth A 685  enclosed  lth A 685  enclosed  lth A 665  AC-3  Rated operational current  Open, 3-pole: 50 – 60 Hz  Notes  220 V 230 V  le A 185  240 V  le A 185  380 V 400 V  le A 185	Open			
at 55 °C	at 40 °C	I <sub>th</sub> =I <sub>e</sub>	Α	337
at 60 °C	at 50 °C	I <sub>th</sub> =I <sub>e</sub>	Α	301
at 60 °C	at 55 °C			287
enclosed  Notes  Conventional free air thermal current, 1 pole  Note  Note  Note  1th  A 685  enclosed  1th  A 685  AC-3  Rated operational current  Open, 3-pole: 50 – 60 Hz  Notes  Notes  1e  A 185  240 V  1e  A 185				
Notes Conventional free air thermal current, 1 pole  Note  Note  Ith A 685  enclosed  Ith A 625  Rated operational current  Open, 3-pole: 50 – 60 Hz  Notes  At maximum permissible ambient air temperature  At maximum permissible ambient temperature (open.)				
Conventional free air thermal current, 1 pole  Note  at maximum permissible ambient air temperature  open  lth A 685  enclosed  AC-3  Rated operational current  Open, 3-pole: 50 – 60 Hz  Notes  Notes  Le A 185  240 V  le A 185		·ui		
Note at maximum permissible ambient air temperature open				
open         I <sub>th</sub> A         685           enclosed         I <sub>th</sub> A         625           AC-3         Rated operational current         V         V           Open, 3-pole: 50 – 60 Hz         At maximum permissible ambient temperature (open.)           220 V 230 V         I <sub>e</sub> A         185           240 V         I <sub>e</sub> A         185           380 V 400 V         I <sub>e</sub> A         185				at maximum permissible ambient air temperature
enclosed		lth	Α	
AC-3  Rated operational current  Open, 3-pole: 50 – 60 Hz  Notes  At maximum permissible ambient temperature (open.)  220 V 230 V  le A 185  380 V 400 V  le A 185				
Rated operational current       Open, 3-pole: 50 – 60 Hz       At maximum permissible ambient temperature (open.)         Notes       Ie       A         220 V 230 V       Ie       A         240 V       Ie       A         380 V 400 V       Ie       A         185       A         185       A		'tn	^	920
Open, 3-pole: 50 – 60 Hz       At maximum permissible ambient temperature (open.)         Notes       At maximum permissible ambient temperature (open.)         220 V 230 V       Ie       A       185         240 V       Ie       A       185         380 V 400 V       Ie       A       185				
Notes       At maximum permissible ambient temperature (open.)         220 V 230 V       I <sub>e</sub> A       185         240 V       I <sub>e</sub> A       185         380 V 400 V       I <sub>e</sub> A       185				
220 V 230 V     I <sub>e</sub> A     185       240 V     I <sub>e</sub> A     185       380 V 400 V     I <sub>e</sub> A     185				At maximum permissible ambient temperature (open )
240 V I <sub>e</sub> A 185 380 V 400 V I <sub>e</sub> A 185		la.	Δ	
380 V 400 V I <sub>e</sub> A 185				
413 V I <sub>e</sub> A I85				
	413 V	I <sub>e</sub>	А	103

	440V	I <sub>e</sub>	Α	185
1008   V				
TODO				
Montr rating		I <sub>e</sub>	Α	
2201/2301/ P	1000 V	l <sub>e</sub>	Α	76
	Motor rating	P	kWh	
390	220 V 230 V	P	kW	55
415 V   40	240V	Р	kW	62
440   V	380 V 400 V	Р	kW	90
1500   V	415 V	Р	kW	110
1500   V		Р		
100				
ACL 4  Related operational current  Open 5-pole 50 - 40 My  200 /				
Ratic operational current   1907. 3-point 50 - 00 let   1907. 3-point 50 let   1907. 3-		۲	KVV	108
Open, 3-pole: 50 - 60 Hz				
200 V 200 V				
240 V	Open, 3-pole: 50 – 60 Hz			
180	220 V 230 V	l <sub>e</sub>	Α	136
A   15   V	240 V	I <sub>e</sub>	Α	136
	380 V 400 V	I <sub>e</sub>	Α	136
440 V	415 V	ام	Α	136
S00 V				
1000 V   1				
Motor rating	660 V 690 V	l <sub>e</sub>	Α	110
220 V 230 V	1000 V	I <sub>e</sub>	Α	55
240 \ V	Motor rating	P	kWh	
Series   S	220 V 230 V	Р	kW	41
415 V	240 V	Р	kW	45
440 V   P	380 V 400 V	Р	kW	75
S00 V	415 V	Р	kW	80
SOU	440 V	Р	kW	85
660 V 690 V         P         kW         102           1000 V         P         kW         77           Condensor operation           Undividual compensation, rated operational current I <sub>0</sub> of three-phase capacitors         S         I		P		
1000 V   P   kW   77     Condensor operation   P   kW   77     Condensor operation   P   KW   78     Condensor operation   P   KW   78     Copen				
Condensor operation           Individual compensation, rated operational current I <sub>a</sub> of three-phase capacitors				
Individual compensation, rated operational current l <sub>e</sub> of three-phase capacitors         A         20           up to 525 V         A         23           690 V         A         133           Max. inrush current peak         v l <sub>e</sub> 30           Component lifespan         Operations         x 10 <sup>6</sup> 0.1           Max. operating frequency         ops/h         20           DC-1         DC-1         v l <sub>e</sub> be DILDC300/DILDC600 or on request           Current heat loss         v l <sub>e</sub> be DILDC300/DILDC600 or on request           Current heat loss at l <sub>e</sub> to AC-3/400 V         v la         34           AC operated         v l <sub>e</sub> be DILDC300/DILDC600 or on request           Magnet systems         v la         30           VS         40         50           AC operated         v l <sub>e</sub> be DILDC300/DILDC600 or on request		г	KVV	n e e e e e e e e e e e e e e e e e e e
Open         up to 525 V         A         220           690 V         A         133           Max. inrush current peak         x le         30           Component lifespan         Operations         x 16         0.1           Max. operating frequency         Ops/h         200           DC-1         V         40           Notes         see DILDC300/DILDC600 or on request           Current heat loss           3 pole, at l <sub>th</sub> (60°)         W         34           Current heat loss at l <sub>t</sub> to AC-3/400 V         W         34           Magnet systems           Voltage tolerance         V         480 - 500 V 50/60 Hz           US         480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x Us min - 0.15 x Us max				
Lange   Lang				
Max. inrush current peak				200
Max. inrush current peak         x I <sub>e</sub> 30           Component lifespan         Operations         x 10 <sup>6</sup> 0.1           Max. operating frequency         Ops/h         200           DC           Rated operational current, open         Image: Component lifespan         Image: Component lifespan           DC-1         Image: Component lifespan         Image: Component lifespan           Notes         See DILD C300/DILD C600 or on request           Current heat loss           3 pole, at I <sub>th</sub> (60°)         W         34           Current heat loss at I <sub>th</sub> to AC-3/400 V         W         34           Magnet systems           Voltage tolerance         Image: Component lifespan         Image: Component lifespan         Image: Component lifespan           US         AC operated         Pick-up         Image: Component lifespan         Image: Component lifespan           AC operated         Pick-up         Operated         Ose x U <sub>S min</sub> - 1.15 x U <sub>S max</sub>				
Component lifespan         Operations         x 10 <sup>6</sup> 0.1           Max. operating frequency         Ops/h         200           DC           Rated operational current, open         Image: Component lifespan         Image: Compo				
Max. operating frequency         Ops/h         200           DC           Rated operational current, open         See DILDC300/DILDC600 or on request           Notes         See DILDC300/DILDC600 or on request           Current heat loss         W         34           Current heat loss at I <sub>e</sub> to AC-3/400 V         W         16           Magnet systems         W         480 - 500 V 50/60 Hz           Voltage tolerance         480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	Max. inrush current peak		x l <sub>e</sub>	30
DC         Rated operational current, open       See DILDC300/DILDC600 or on request         Notes       See DILDC300/DILDC600 or on request         Current heat loss       W 34         Current heat loss at I <sub>e</sub> to AC-3/400 V       W 16         Magnet systems       W         Voltage tolerance       480 - 500 V 50/60 Hz         AC operated       Pick-up       0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated       Drop-out       0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	Component lifespan	Operations	x 10 <sup>6</sup>	0.1
DC         Rated operational current, open       See DILDC300/DILDC600 or on request         Notes       See DILDC300/DILDC600 or on request         Current heat loss       W 34         Current heat loss at I <sub>e</sub> to AC-3/400 V       W 16         Magnet systems       W         Voltage tolerance       480 - 500 V 50/60 Hz         AC operated       Pick-up       0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated       Drop-out       0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	Max. operating frequency		Ops/h	200
DC-1         see DILDC300/DILD C600 or on request           Current heat loss         V         34           3 pole, at I <sub>th</sub> (60°)         W         34           Current heat loss at I <sub>e</sub> to AC-3/400 V         W         16           Magnet systems         Voltage tolerance         V         480 - 500 V 50/60 Hz           US         480 - 500 V 50/60 Hz         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Pick-up         0.8 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	DC			
Notes         see DILDC300/DILDC600 or on request           Current heat loss           3 pole, at I <sub>th</sub> (60°)         W 34           Current heat loss at I <sub>e</sub> to AC-3/400 V         W 16           Magnet systems           Voltage tolerance         W 480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	Rated operational current, open			
Current heat loss           3 pole, at I <sub>th</sub> (60°)         W         34           Current heat loss at I <sub>e</sub> to AC-3/400 V         W         16           Magnet systems           Voltage tolerance         W         480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	DC-1			
Current heat loss           3 pole, at I <sub>th</sub> (60°)         W         34           Current heat loss at I <sub>e</sub> to AC-3/400 V         W         16           Magnet systems           Voltage tolerance         W         480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	Notes			see DILDC300/DILDC600 or on request
Current heat loss at I <sub>e</sub> to AC-3/400 V         W         16           Magnet systems         Voltage tolerance         480 - 500 V 50/60 Hz           U <sub>S</sub> 480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	Current heat loss			
Current heat loss at I <sub>e</sub> to AC-3/400 V         W         16           Magnet systems         Voltage tolerance         480 - 500 V 50/60 Hz           U <sub>S</sub> 480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>	3 pole, at I <sub>th</sub> (60°)		W	34
Magnet systems           Voltage tolerance         480 - 500 V 50/60 Hz           US         480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>			W	16
Voltage tolerance         480 - 500 V 50/60 Hz           US         480 - 500 V 50/60 Hz           AC operated         Pick-up         0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated         Drop-out         0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>				
US       480 - 500 V 50/60 Hz         AC operated       Pick-up       0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated       Drop-out       0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>				
AC operated Pick-up 0.8 x U <sub>S min</sub> - 1.15 x U <sub>S max</sub> AC operated Drop-out 0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>				480 - 500 V 50/60 Hz
AC operated Drop-out 0.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>		Pick-up		
Power consumption of the coil in a cold state and 1.0 x U <sub>S</sub>		Drop-out		U.25 x U <sub>S min</sub> - 0.6 x U <sub>S max</sub>
	Power consumption of the coil in a cold state and 1.0 x $U_{\mbox{\scriptsize S}}$			

Pull-in power	Pick-up	VA	210
Pull-in power	Pick-up	W	180
Sealing power	Sealing	VA	2.6
Sealing power	Sealing	W	2.1
Duty factor		% DF	100
Changeover time at 100 % U <sub>S</sub> (recommended value)			
Main contacts			
Closing delay		ms	60
Opening delay		ms	40
Electromagnetic compatibility (EMC)			
Electromagnetic compatibility			This product is designed for operation in industrial environments (environment A). Its use in residential environments (environment B) may cause radio-frequency interference, requiring additional noise suppression measures.
Rating data for approved types			
Switching capacity			
Maximum motor rating			
Three-phase			
200 V 208 V		HP	50
		UD	00
230 V 240 V		НР	60
460 V 480 V		HP	125
575 V 600 V		HP	150
General use		Α	250
Auxiliary contacts			
Pilot Duty			
AC operated			A600
DC operated			P300
General Use			
AC		V	600
AC		Α	15
DC		V	250
DC		Α	1
Short Circuit Current Rating		SCCR	
Basic Rating			
SCCR		kA	10
max. Fuse		Α	700
max. CB		Α	800
480 V High Fault			
SCCR (fuse)		kA	100
max. Fuse		Α	600 Class J
SCCR (CB)		kA	65
max. CB		Α	350
600 V High Fault			
SCCR (fuse)		kA	100
max. Fuse		Α	600 Class J
SCCR (CB)		kA	50
max. CB		Α	350
Special Purpose Ratings			
Definite Purpose Ratings (100,000 cycles acc. to UL 1995)			
LRA 480V 60Hz 3phase		Α	2016
FLA 480V 60Hz 3phase		Α	336
LRA 600V 60Hz 3phase		Α	1680
FLA 600V 60Hz 3phase		Α	280

# Design verification as per IEC/EN 61439

boolgii vormoution do por 120, 211 or 100			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	185
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	5.33
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	2.1
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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

#### **Technical data ETIM 7.0**

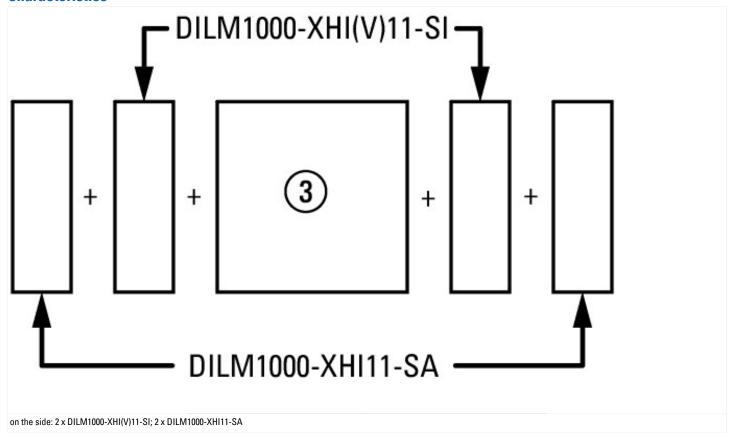
Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066)

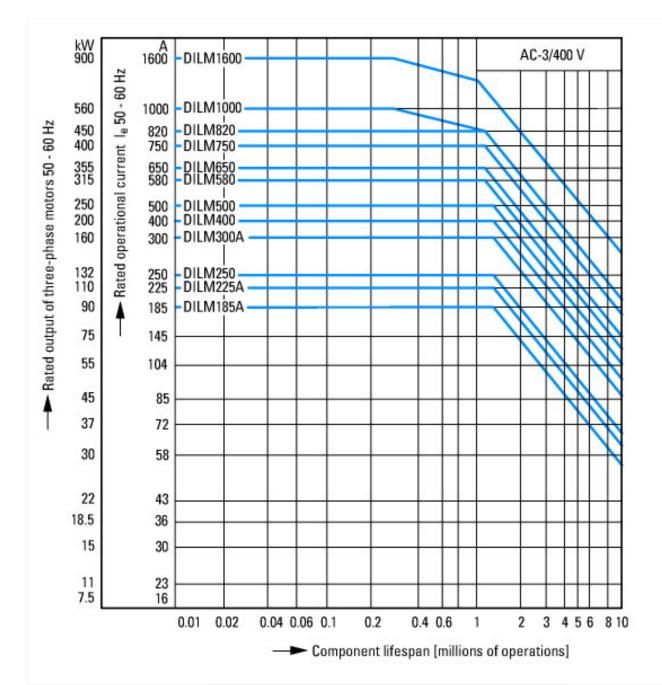
Electric engineering, automation, process control engineering / Low-voltage switch tec	chnology / Contacto	(LV) / Power contactor, AC switching (ecl@ss10.0.1-27-37-10-03 [AAB718015])
Rated control supply voltage Us at AC 50HZ	V	480 - 500
Rated control supply voltage Us at AC 60HZ	V	480 - 500
Rated control supply voltage Us at DC	V	0 - 0
Voltage type for actuating		AC
Rated operation current le at AC-1, 400 V	Α	337
Rated operation current le at AC-3, 400 V	Α	185
Rated operation power at AC-3, 400 V	kW	90
Rated operation current le at AC-4, 400 V	Α	136
Rated operation power at AC-4, 400 V	kW	75
Rated operation power NEMA	kW	93
Modular version		No
Number of auxiliary contacts as normally open contact		2
Number of auxiliary contacts as normally closed contact		2
Type of electrical connection of main circuit		Rail connection
Number of normally closed contacts as main contact		0

### **Approvals**

Product Standards	IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CE marking
UL File No.	E29096
UL Category Control No.	NLDX
CSA File No.	2389068
CSA Class No.	3211-04
North America Certification	UL listed, CSA certified
Specially designed for North America	No

#### **Characteristics**

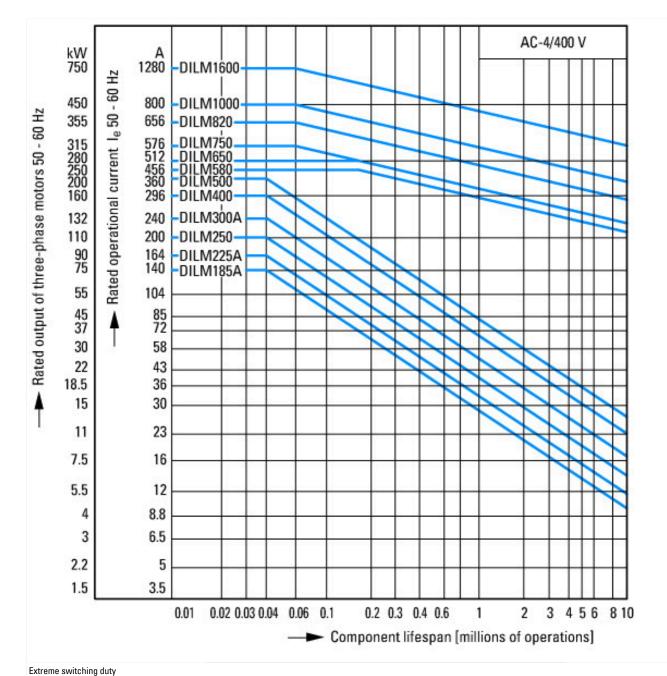




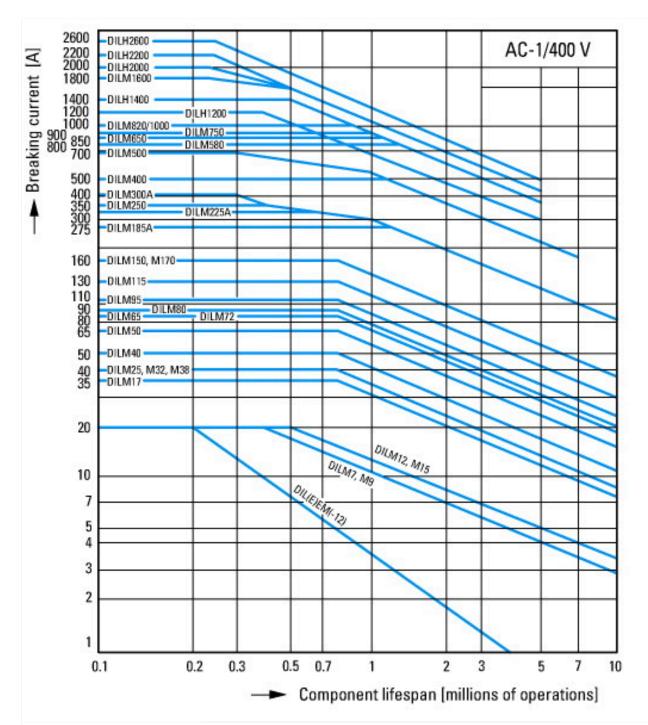
Normal switching duty Normal AC induction motor Operating characteristics Switch on: from stop Switch off: during run Electrical characteristics: Switch on: up to 6 x Rated motor current Switch off: up to 1 x Rated motor current Utility category 100 % AC-3 **Typical Applications** Compressors Mixers Pumps Escalators Agitators fan Conveyor belts Centrifuges Hinged flaps

Bucket-elevator Air-conditioning systems

General drives for manufacturing and processing machines

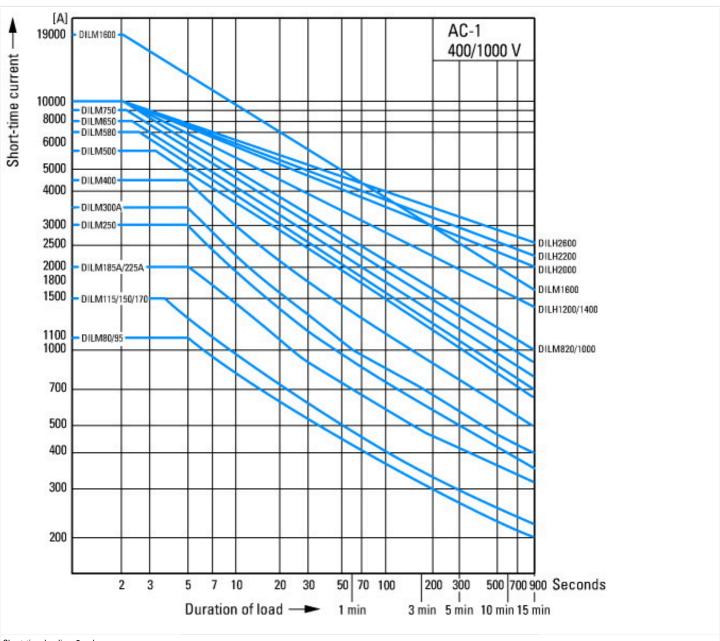


Extreme switching duty
Squirrel-cage motor
Operating characteristics
Inching, plugging, reversing
Electrical characteristics
Make: up to 6 x rated motor current
Break: up to 6 x rated motor current
Utilization category
100 % AC-4
Typical applications
Printing presses
Wire-drawing machines
Centrifuges
Special drives for manufacturing and processing machines



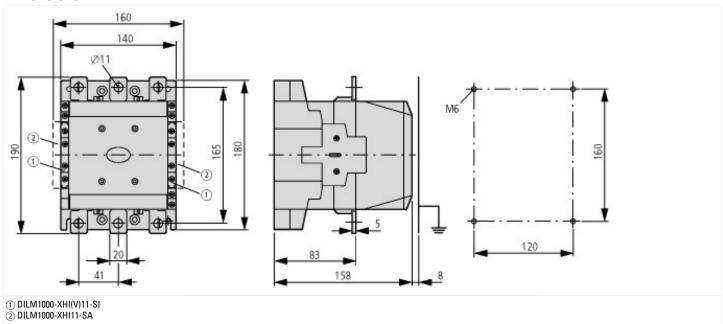
Switching conditions for 3 pole, non-motor loads Operating characteristics
Non inductive and slightly inductive loads
Electrical characteristics
Switch on: 1 x rated operational current
Switch off: 1 x rated operational current
Utilization category
100 % AC-1
Typical examples of application

Electric heat



Short-time loading, 3-pole
Time interval between two loading cycles: 15 minutes

#### **Dimensions**



DILM185...DILM500 DILMC185-S...DILMC500-S DILM185-S...DILM500-S