SIEMENS

Data sheet

3VL4740-1EM46-0AA0

circuit breaker VL400N standard breaking capacity Icu=55kA, 415V AC 4-pole, line protection TU, TM, LI In=400A, rated current IR=320...400A, overload prot. II=2000...4000A, short-circuit protection N protected (100%) without auxiliary release without auxiliary/alarm switch

Model		
type of the driving mechanism motor drive	No	
design of the overcurrent release	TM	
General technical data		
number of poles	4	
size of the circuit-breaker	3VL4	
mechanical service life (operating cycles) typical	20 000	
electrical endurance (operating cycles) typical	10 000	
utilization category	A	
performance class for circuit breaker	N	
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	Q	
operating frequency maximum	120 1/s	
Voltage		
Rated operational voltage Ue max.	690 V	
 insulation voltage rated value 	800 V	
• insulation voltage (Ui) at AC rated value	800 V	
surge voltage resistance rated value	8 kV	
operating voltage		
rated value maximum	690 V	
 for main current circuit at AC at 50 Hz maximum 	690 V	
 for main current circuit at AC at 60 Hz maximum 	690 V	
 for main current circuit at DC maximum 	500 V	
Protection class		
protection class IP	IP20	
protection function of the overcurrent release	LIN	
Main circuit		
operating frequency		
1 rated value	50 Hz	
• 2 rated value	60 Hz	
Auxiliary circuit		
number of CO contacts for auxiliary contacts	0	
number of NC contacts for auxiliary contacts	0	
number of NO contacts for auxiliary contacts	0	
Suitability		
suitability for use	system protection	
Adjustable parameters		
adjustable current response value current of the current- dependent overload release initial value	320 A	
Product details		
product component		
• trip indicator	No	
auxiliary switch	No	
voltage trigger	No	
undervoltage release	No	
undervoltage release with leading contact	No	
product extension optional motor drive	Yes	
Product function		
product function		

of thermal overload trip unit	adjustable	
grounding protection	No	
for neutral conductors short-circuit and overload proof	Yes	
overload protection	Yes	
Short circuit		
operating short-circuit current breaking capacity (lcs)		
at 240 V rated value	65 kA	
• at 415 V rated value	55 kA	
• at 500 V rated value	20 kA	
at 690 V rated value	8 kA	
maximum short-circuit current breaking capacity (Icu)		
at 240 V rated value	65 kA	
• at 415 V rated value	55 kA	
• at 440 V rated value	35 kA	
 at 480 V according to NEMA rated value 	35 kA	
• at 500 V rated value	25 kA	
 at 600 V according to NEMA rated value 	20 kA	
at 690 V rated value	15 kA	
Connections		
arrangement of electrical connectors for main current circuit	front side	
type of connectable conductor cross-sections for main contacts		
with flexible busbar	25 x 10	
• solid	50 300 mm²	
 finely stranded with core end processing 	50 240 mm²	
stranded	50 300 mm²	
type of connectable conductor cross-sections for auxiliary contacts		
• solid	0.75 1.5 mm ²	
finely stranded with core end processing	0,75 1.0 mm²	
type of electrical connection for main current circuit	screw-type terminals	
Mechanical Design		
height	279.5 mm	
width	183.5 mm	
depth	163.5 mm	
fastening method	fixed mounting	
Environmental conditions		
ambient temperature during operation		
• minimum	0 °C	
maximum	70 °C	
ambient temperature during storage		
• minimum	-40 °C	
maximum	80 °C	
Approvals Certificates		
General Product Approval	other	Environment
Confirmation CE EG-Konf.	Confirmation Miscellaneous	Environmental Confirmations

Environment

Environmental Con-firmations

Further information

Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VL4740-1EM46-0AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VL4740-1EM46-0AA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL4740-1EM46-0AA0

CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications

http://www.siemens.com/specifications