



circuit breaker 3VA6 UL Frame 800 breaking capacity class M 35 kA @ 480 V 4-pole, line protection ETU330, LIG, $I_n=600$ A overload protection, 100% rated $I_r=240$ A ...600 A short-circuit protection $I_i=1.5...12 \times I_n$ neutral conductor protection adjustable (OFF, 50%, 100%) ground-fault protection $I_G=0.2...1 \times I_n$, $t_g=0.1/0.3$ s nut keeper kit

Model	
product brand name	SETRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MMAE
design of the product	System protection
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the overcurrent release	ETU330
protection function of the overcurrent release	LIG
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	151 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	50.33 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	5 100
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 500
electrical endurance (operating cycles) / at 480 V	5 100
electrical endurance (operating cycles) / at 600 V	3 500
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L + N-conductor
product function	
• communication function	No
• other measurement function	No
Net Weight	17.01 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	600 A
• at 45 °C	600 A
• at 50 °C	600 A
• at 55 °C	600 A
• at 60 °C	600 A
• at 65 °C	555 A
• at 70 °C	510 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M

maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	25 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	19 kA
short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	53 kA
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V	100 kA
• at 480 V	35 kA
• at 600 V	25 kA
Adjustable parameters	
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
• minimum	250 A
• maximum	600 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
• minimum	0.5 s
• maximum	17 s
adjustable response value setting current (I _l) / for I-tripping	
• minimum	900 A
• maximum	7 200 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value	120 A
• full-scale value	600 A
adjustable response value delay time (t _g) / for G-tripping / with I _{0t} characteristic	
• minimum	0.1 s
• maximum	0.3 s
adjustable setting current (I _N) / for N-tripping	
• minimum	300 A
• maximum	600 A
design of the N-conductor protection	adjustable OFF; 50%; 100%
product function / grounding protection	Yes
Mechanical Design	
product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
height [in]	12.91 in
height	328 mm
width [in]	11.02 in
width	280 mm
depth [in]	4.72 in
depth	120 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	nut keeper kit on both ends
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	20 x 4 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	50 x 28 mm

Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	No
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C
reference code / according to IEC 81346-2	Q
Approvals / Certificates	
General Product Approval	



[Confirmation](#)

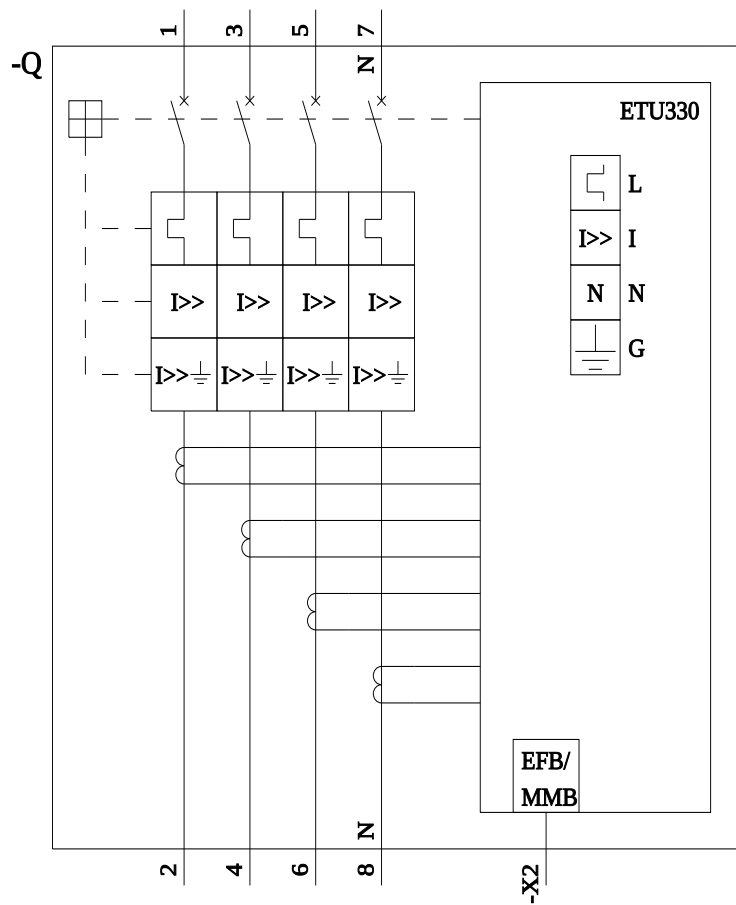
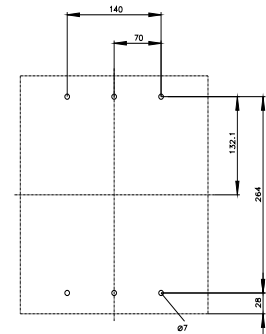
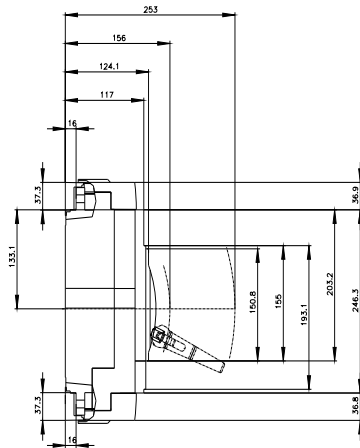
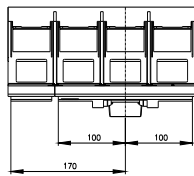
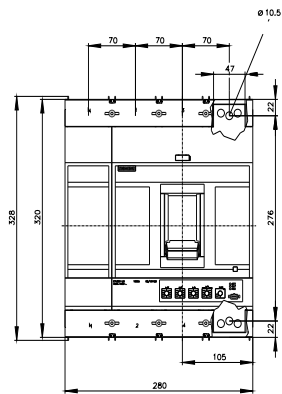


[Miscellaneous](#)

General Product Approval	EMV	Test Certificates	Maritime application	other
		Type Test Certificates/Test Report		Confirmation Miscellaneous

Dangerous goods	Environment
Transport Information	Environmental Confirmations

Further information
Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information for data generation and storage https://support.industry.siemens.com/cs/ww/en/view/109995012 Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6560-5HM42-2AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA6560-5HM42-2AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6560-5HM42-2AA0 CAX-Online-Generator https://www.siemens.com/cax Tender specifications https://www.siemens.com/specifications





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