



circuit breaker 3VA6 UL frame 600 breaking capacity class M 35kA @ 480V 4-pole, line protection ETU830, LIG, In=400A overload protection Ir=160A...400A short-circuit protection Ii=1.5...12 x In ground-fault protection Ig=0.2...1 x In, tg=0.05-0.8s without connection

Model	
product brand name	SETRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MLAE
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	ETU830
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	70 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	23.33 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 500
electrical endurance (operating cycles) / at 480 V	4 000
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	Yes
• other measurement function	Yes
Net Weight	6.9 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	400 A
• at 45 °C	400 A
• at 50 °C	400 A
• at 55 °C	400 A
• at 60 °C	400 A
• at 65 °C	400 A
• at 70 °C	400 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 • at 415 V • at 690 V	85 kA 55 kA 6 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V • at 415 V • at 690 V	85 kA 55 kA 6 kA
short-circuit current making capacity (Icm)	
• at 240 V • at 415 V • at 690 V	187 kA 121 kA 9 kA
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V • at 480 V • at 600 V	100 kA 35 kA 18 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum • maximum	150 A 400 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum • maximum	0.5 s 25 s
adjustable response value setting current (Ii) / for I-tripping	
• minimum • maximum	600 A 4 800 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value • full-scale value	80 A 400 A
adjustable response value delay time (tg) / for G-tripping / with I0t characteristic	
• minimum • maximum	0.05 s 0.8 s
adjustable response value setting current (Ig) / for G-tripping / with I2t characteristic	
• minimum • maximum	80 A 400 A
adjustable response value delay time (tg) / for G-tripping / with I2t characteristic	
• minimum • maximum	0.05 s 0.8 s
adjustable setting current (InN) / for N-tripping	
• minimum • maximum	80 A 600 A
adjustable current response value current / of instantaneous short-circuit trip unit	
• minimum • maximum	600 A 4 800 A
design of the N-conductor protection	adjustable OFF; 20% to 150%
product function / grounding protection	Yes
total break time / for G-tripping / with standard characteristic	
• initial value • full-scale value	0.05 s 0.8 s
Mechanical Design	
product component	
• undervoltage release • voltage trigger • trip indicator	No No No
height [in]	9.76 in
height	248 mm

width [in]	7.24 in
width	184 mm
depth [in]	4.33 in
depth	110 mm

Connections

arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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Accessories

product extension / optional / motor drive	Yes
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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](#)



General Product Approval

EMV

Marine / Shipping



[Miscellaneous](#)



Marine / Shipping

other



[Confirmation](#)

[Miscellaneous](#)

[Miscellaneous](#)

Dangerous Good

[Transport Information](#)

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mifb=3VA6440-5KM41-0AA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6440-5KM41-0AA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)





