## SIEMENS

## Data sheet

## 3VA5180-4EF36-0AA0



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480 V 3-pole, line protection TM240, ATAM, In=80A overload protection Ir=64A ...80A short-circuit protection Ii=5...10 x In cable connection on both sides

Model           product brand name         SENTRON           product designation         Molded-case circuit breaker           product designation / according to UL 189 / Heating,         SEAS           Ar Conditioning, and Refrigeration circuit breaker (HACR         Yes           design of the load switch / according to UL 489 / High-         No           intensity-Discharge circuit breaker (HID Type)         No           design of the load switch / according to UL 489 / Switching         No           Duty circuit breaker (SWD Type)         No           design of the load switch / according to UL 489 / Switching         No           Duty circuit breaker (SWD Type)         No           design of the overcurrent release         TM240           number of poles         3           Ceneral tochnical data         800 V           most of the get / rated value         800 V           operating voltage / rate value         600 V           operating voltage / rate value of the current / at AC / i         800 V           operating voltage / rate value         600 V           operating voltage / rate value of the current / at AC / i         643 W           in hot operating state / per pole         643 W           mechanical service life (switching cycles) / t AC-1 / at 8000         8000		
product designationMolded-case circuit breakerproduct designation / according to UL fileSEASProduct versionSystem protectiondesign of the load switch / according to UL 489 / Heating, Ar Conditioning, and Refrigeration circuit breaker (HACR Type)Yesdesign of the load switch / according to UL 489 / High- Intensity-Discharge circuit breaker (HD Type)Nodesign of the load switch / according to UL 489 / Switching Duty circuit breaker (WD Type)Nodesign of the overcurrent releaseTM240protection function of the overcurrent releaseL1insulation voltage / rated value800 VMax. rated operational voltage U with DC500 Voperating voltage / rated value600 VMax. rated operational voltage U with DC500 Voperating voltage / rated value600 VSolver los S/ for rated value of the current / at AC / in to to prate value of the current / at AC / in the operating voltage / at AC / rated value643 WBiourdation contactor (switching cycles) / typical20 000Electrical endurance (switching cycles) / typical20 000Electrical endurance (switching cycles) / at 600 V4 000V 50/60 Hz8 000electrical endurance (switching cycles) / at 600 V4 000voltage / rate value8 000velocitical endurance (switching cycles) / at 600 V4 000velocitical endurance (switching cycles) / at 600 V4 000velocitical endurance (switching cycles) / at 600 V8 000electrical endurance (switching cycles) / at 600 V8 000 <t< td=""><td>Model</td><td></td></t<>	Model	
product designation / according to UL file         SEAS           Product version         System protection           design of the load switch / according to UL 489 / Heating,         Yes           Ar Conditioning, and Refrigeration circuit breaker (HACR Type)         No           design of the load switch / according to UL 489 / High- Intensity-Discharge circuit breaker (HD Type)         No           design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)         No           design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)         No           design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)         No           design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)         No           design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)         No           design of the load switch / according to UL 489 / Switching Operating voltage / at AC / rated value         800 V           power loss (M) / maximum         19.3 W         64.3 W           Active power loss / for rated value of the current / at AC / in tho operating state / per pole         8000           mechanical service life (switching cycles) / ta AC - 1 / at 300         8000           Selectrical endurance (switching cycles) / at AC - 1 / at 600 V         4000           V 5060 Hz         electrical	•	
Product version     System protection       design of the load switch / according to UL 489 / Heating, Ar Conditioning, and Refrigeration circuit breaker (HACR)     Yes       design of the load switch / according to UL 489 / High- Intensity-Discharge circuit breaker (HDT ype)     No       design of the load switch / according to UL 489 / High- Intensity-Discharge circuit breaker (HDT ype)     No       design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)     No       design of the overcurrent release     TM240       protection function of the overcurrent release     Ll       number of poles     3       Condentate data     500 V       insultation voltage / rated value     800 V       Max. rated operational voltage Ue with DC     500 V       operating voltage / rated value     600 V       power loss / for rated value of the current / at AC / in hot operating state / per pole     643 W       mechanical service life (switching cycles) / typical     20 000       Electrical endurance (switching cycles) / typical     4000       Electrical endurance (switching cycles) / at AC-1 / at 690 V     4000       V 50%0 Hz     4000       electrical endurance (switching cycles) / at 80 V     8 000       electrical endurance (switching cycles) / at 80 V     8 000       electrical endurance (switching cycles) / at 80 V     8 000       electrical endurance (switching cyc		
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)       Yes         design of the load switch / according to UL 489 / Nigh- Intensity-Discharge circuit breaker (HACR torcuit breaker (SWD Type)       No         design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)       No         design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)       No         design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)       No         design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)       No         design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)       No         design of the voercurrent release number of poles       TM240         insulation voltage / at AC / rated value       600 V         operating voltage / at AC / rated value       600 V         operating voltage / at AC / rated value       600 V         power loss (M/ maximum       19.3 W         Active power loss / Mor rated value of the current / at AC / in to operating voltage / at AC / at C-1 / at AC / in to operating voltage / at AC / at C-1 / at 4800       8000         electrical endurance (switching cycles) / at AC-1 / at 690       V       0000         V 50/60 Hz       8000       electrical endurance (switching		01.0
Air Conditioning, and Refrigeration dircuit breaker (HACR Type)       No         design of the load switch / according to UL 489 / High- Intensity-Discharge circuit breaker (HID Type)       No         design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)       No         design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)       TM240         general technical data       TM240         insulation voltage / rated value       800 V         Max. rated operational voltage le with DC       500 V         opwer loss / for rated value       690 V         power loss / for rated value dite current / at AC / in hot operating stat / per pole       643 W         mechanical service life (witching cycles) / typical       20 000         Electrical endurance (switching cycles) / typical       20 000         Electrical endurance (switching cycles) / at AC-1 / at 3800415 V 50060 Hz       8 000         electrical endurance (switching cycles) / at 600 V       4 000         V Sol60 Hz       8 000         electrical endurance (switching cycles) / at 600 V       4 000         V Sol60 Hz       8 000         electrical endurance (switching cycles) / at 600 V       4 000         v Sol60 Hz       8 000         electrical endurance (switching cycles) / at 600 V       4 000         V		5 1
Intensity-Discharge circuit breaker (4ID Type)       No         design of the load switch / according to UL 489 / Switching       No         puty circuit breaker (SWD Type)       Max.         geografic design of the overcurrent release       Ll         number of poles       3         Ceneral technical data         insulation voltage / rated value       800 V         Max. rated operational voltage Ue with DC       500 V         operating voltage / at AC / rated value       690 V         power loss [W] / maximum       19.3 W         Active power loss / for rated value of the current / at AC /       64.3 W         mechanical service life (switching cycles) / typical       20 000         Electrical endurance (switching cycles) / typical       20 000         Electrical endurance (switching cycles) / at AC-1 / at 800       8 000         V 50/60 Hz       4 000         electrical endurance (switching cycles) / at 480 V       8 000         electrical endurance (switching cycles) / at 480 V       4 000         veltcrical endurance (switching cycles) / at 480 V       4 000         veltcrical endurance (switching cycles) / at 480 V       4 000         veltcrical endurance (switching cycles) / at 60 V       4 000         veltcrical endurance (switching cycles) / at 60 V       4 000 <td>Air Conditioning, and Refrigeration circuit breaker (HACR</td> <td>Yes</td>	Air Conditioning, and Refrigeration circuit breaker (HACR	Yes
Duty circuit breaker (SWD Type)       TM240         design of the overcurrent release       L1         number of poles       3         Ceneral technical data       800 V         Max. rated operational voltage Ue with DC       500 V         operating voltage / rated value       690 V         power loss [VM] / maximum       19.3 W         Active power loss [VM] / maximum       19.3 W         Active power loss [VM] / maximum       6.43 W         in hot operating state / per pole       20 000         electrical endurance (switching cycles) / typical       20 000         Electrical endurance (switching cycles) / at AC-1 / at       8 000         380/415 V 50/60 Hz       4 000         electrical endurance (switching cycles) / at AC-1 / at 690       V 000         V 50/60 Hz       8 000         electrical endurance (switching cycles) / at AC0 V       8 000         electrical endurance (switching cycles) / at ABO V       8 000         electrical endurance (switching cycles) / at ABO V       8 000         ground-fault monitoring version       without         product function       No         other measurement function       No         other measurement function       No         other measurement function       80 A <td>Intensity-Discharge circuit breaker (HID Type)</td> <td>No</td>	Intensity-Discharge circuit breaker (HID Type)	No
protection function of the overcurrent release         LI           number of poles         3           General technical data         800 V           Max. rated operational voltage / rated value         800 V           operating voltage / rated value         690 V           operating voltage / at AC / rated value         690 V           power loss [W] / maximum         19.3 W           Active power loss / for rated value of the current / at AC /         6.43 W           in hot operating state / per pole         mechanical service life (switching cycles) / typical         20 000           Electrical endurance (switching cycles) / typical         20 000         2000           Electrical endurance (switching cycles) / at AC-1 / at         8000         300415 V 50/60 Hz           Electrical endurance (switching cycles) / at A80 V         8 000         electrical endurance (switching cycles) / at A80 V         8 000           electrical endurance (switching cycles) / at 480 V         8 000         electrical endurance (switching cycles) / at 800 V         4 000           V 50/60 Hz         No         ground-fault monitoring version         without           product function         No         stat         stat           • communication function         No         stat         stat           • at 40 °C         80 A	0 0 0	No
number of poles     3       General technical data       insulation voltage / rated value     800 V       Max. rated operational voltage Ue with DC     500 V       operating voltage / at AC / rated value     690 V       power loss [W] / maximum     19.3 W       Active power loss / for rated value of the current / at AC / in hot operating state / per pole     6.43 W       mechanical service life (switching cycles) / typical     20 000       Electrical endurance (switching cycles) / at AC-1 / at     8 000       380/415 V 50/60 Hz     8 000       Electrical endurance (switching cycles) / at AC-1 / at 680     4 000       V 50/60 Hz     8 000       electrical endurance (switching cycles) / at AC-1 / at 680 V     8 000       electrical endurance (switching cycles) / at AC-0 V     4 000       V 50/60 Hz     electrical endurance (switching cycles) / at 600 V     4 000       V 50/60 Hz     electrical endurance (switching cycles) / at 600 V     4 000       No     without     motion       product function     No     No       electrical endurance (switching cycles) / at 600 V     4 000       Volut function     No     No       e other measurement function     No       other measurement function     No       Nother measurement function     80 A       e at 40 °C <td< td=""><td>design of the overcurrent release</td><td>TM240</td></td<>	design of the overcurrent release	TM240
General technical data         insulation voltage / rated value       800 V         Max. rated operational voltage Ue with DC       500 V         operating voltage / at AC / rated value       690 V         power loss [W] / maximum       19.3 W         Active power loss / for rated value of the current / at AC /       6.43 W         nh ot operating state / per pole       6.43 W         mechanical service life (switching cycles) / typical       20 000         Electrical endurance (switching cycles) / at AC-1 / at       8 000         380/415 V 50/60 Hz       8 000         electrical endurance (switching cycles) / at AC-1 / at 690       4 000         V 50/60 Hz       8 000         electrical endurance (switching cycles) / at 480 V       8 000         electrical endurance (switching cycles) / at 600 V       4 000         Netural conductors / upgradeable/retrofittable       No         ground-fault monitoring version       without         product function       No         • other measurement function       No         • other measurement function       No         • at 40 °C       80 A         • at 45 °C       78 A         • at 45 °C       78 A         • at 50 °C       77 A         • at 55 °C	protection function of the overcurrent release	U
insulation voltage / rated value     800 V       Max. rated operational voltage Ue with DC     500 V       operating voltage / at AC / rated value     690 V       power loss [W] / maximum     19.3 W       Active power loss / for rated value of the current / at AC /     6.43 W       in hot operating state / per pole     20 000       mechanical service life (switching cycles) / typical     20 000       Electrical endurance (switching cycles) / at AC-1 / at     8 000       380/415 V 50/60 Hz     8 000       electrical endurance (switching cycles) / at AC-1 / at 690     4 000       V 50/60 Hz     electrical endurance (switching cycles) / at AC0 V     8 000       electrical endurance (switching cycles) / at 600 V     4 000       Neutral conductors / upgradeable/retrofittable     No       ground-fault monitoring version     without       product function     No       • other measurement function     No       Net Weight     0.811 kg       Current     at 40 °C     80 A       • at 40 °C     80 A       • at 45 °C     78 A       • at 45 °C     77 A       • at 55 °C     76 A	number of poles	3
Max. rated operational voltage Ue with DC       500 V         operating voltage / at AC / rated value       690 V         power loss [VI] / maximum       19.3 W         Active power loss / for rated value of the current / at AC / in hot operating state / per pole       643 W         mechanical service life (switching cycles) / typical       20 000         Electrical endurance (switching cycles) / typical       8 000         380/415 V 50/60 Hz       8 000         Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz       8 000         electrical endurance (switching cycles) / at AC-1 / at 690       4 000         V 50/60 Hz       8 000         electrical endurance (switching cycles) / at AC-1 / at 690 V       4 000         V 50/60 Hz       8 000         electrical endurance (switching cycles) / at AC-1 / at 690 V       4 000         Netural conductors / upgradeable/retrofittable       No         ground-fault monitoring version       without         product function       No         • communication function       No         • other measurement function       No         Net Weight       0.811 kg         Current       80 A         • at 40 °C       80 A         • at 45 °C       78 A         • at 55 °C	General technical data	
operating voltage / at AC / rated value690 Vpower loss [W] / maximum19.3 WActive power loss / for rated value of the current / at AC / in hot operating state / per pole6.43 Wmechanical service life (switching cycles) / typical20 000Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz8 000Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz4 000electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz8 000electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz8 000electrical endurance (switching cycles) / at A00 V4 000Neutral conductors / upgradeable/retrofittable vordeable/retrofittableNoorder fault monitoring version vordeation functionNoother measurement function vordeable/tetrofitNoNet Weight0.811 kgCurrentat 40 °C e at 43 °C e at 45 °C e at 50 °Cmarking / according to UL 489 / 100%-rated breaker operational current e at 55 °C76 A	insulation voltage / rated value	800 V
power loss [W] / maximum19.3 WActive power loss / for rated value of the current / at AC / in hot operating state / per pole6.43 Wmechanical service life (switching cycles) / typical20 000Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz8 000Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz4 000V 50/60 Hzelectrical endurance (switching cycles) / at 480 V8 000electrical endurance (switching cycles) / at 600 V4 000V 50/60 Hzwithoutelectrical endurance (switching cycles) / at 600 V4 000v 50/60 HzNoelectrical endurance (switching cycles) / at 600 V4 000v 60/60 HzNoelectrical endurance (switching cycles) / at 600 V4 000Neutral conductors / upgradeable/retrofittableNoground-fault monitoring versionwithoutproduct functionNo• other measurement functionNo• other measurement functionNo• other measurement functionNo• at 40 °C80 A• at 40 °C80 A• at 40 °C78 A• at 40 °C78 A• at 45 °C78 A• at 45 °C76 A	Max. rated operational voltage Ue with DC	500 V
Active power loss / for rated value of the current / at AC / in hot operating state / per pole       6.43 W         mechanical service life (switching cycles) / typical       20 000         Electrical endurance (switching cycles) / at AC-1 / at       8 000         380/415 V 50/60 Hz       8 000         Electrical endurance (switching cycles) / at AC-1 / at 690       4 000         V 50/60 Hz       8 000         electrical endurance (switching cycles) / at AB0 V       8 000         electrical endurance (switching cycles) / at 600 V       4 000         Neutral conductors / upgradeable/retofittable       No         ground-fault monitoring version       without         product function       No         • communication function       No         • other measurement function       No         Net Weight       0.811 kg         Current	operating voltage / at AC / rated value	690 V
in hot operating state / per pole mechanical service life (switching cycles) / typical 20 000 Electrical endurance (switching cycles) / at AC-1 / at 8 000 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at AB0 V 8 000 electrical endurance (switching cycles) / at 600 V 4 000 Neutral conductors / upgradeable/retrofittable ground-fault monitoring version without product function • communication function • other measurement function No Net Weight Current marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 45 °C • at 55 °C 76 A	power loss [W] / maximum	19.3 W
Electrical endurance (switching cycles) / at AC-1 / at 8000       8000         380/415 V 50/60 Hz       4000         Electrical endurance (switching cycles) / at AC-1 / at 690       4000         V 50/60 Hz       8000         electrical endurance (switching cycles) / at 480 V       8000         electrical endurance (switching cycles) / at 480 V       8000         electrical endurance (switching cycles) / at 600 V       4000         Neutral conductors / upgradeable/retrofittable       No         ground-fault monitoring version       without         product function       No         • communication function       No         • other measurement function       No         Net Weight       0.811 kg         Current       at 40 °C         • at 40 °C       80 A         • at 45 °C       78 A         • at 50 °C       77 A         • at 55 °C       76 A		6.43 W
380/415 V 50/60 Hz       4 000         Electrical endurance (switching cycles) / at AC-1 / at 690       4 000         V 50/60 Hz       electrical endurance (switching cycles) / at 480 V       8 000         electrical endurance (switching cycles) / at 600 V       4 000         Neutral conductors / upgradeable/retrofittable       No         ground-fault monitoring version       without         product function       No         • communication function       No         • other measurement function       No         Net Weight       0.811 kg         Current       at 40 °C         • at 40 °C       80 A         • at 45 °C       78 A         • at 50 °C       76 A	mechanical service life (switching cycles) / typical	20 000
V 50/60 Hzelectrical endurance (switching cycles) / at 480 V8 000electrical endurance (switching cycles) / at 600 V4 000Neutral conductors / upgradeable/retrofittableNoground-fault monitoring versionwithoutproduct functionNo• communication functionNo• other measurement functionNoNet Weight0.811 kgCurrentmarking / according to UL 489 / 100%-rated breaker operational current• at 40 °C80 A• at 45 °C78 A• at 50 °C77 A• at 55 °C76 A		8 000
electrical endurance (switching cycles) / at 600 V       4 000         Neutral conductors / upgradeable/retrofittable       No         ground-fault monitoring version       without         product function       No         • communication function       No         • other measurement function       No         Net Weight       0.811 kg         Current         marking / according to UL 489 / 100%-rated breaker         operational current       80 A         • at 40 °C       80 A         • at 45 °C       78 A         • at 50 °C       77 A         • at 55 °C       76 A		4 000
Neutral conductors / upgradeable/retrofittableNoground-fault monitoring versionwithoutproduct functionNo• communication functionNo• other measurement functionNoNet Weight0.811 kgCurrentmarking / according to UL 489 / 100%-rated breakerNo• at 40 °C80 A• at 45 °C78 A• at 50 °C77 A• at 55 °C76 A	electrical endurance (switching cycles) / at 480 V	8 000
ground-fault monitoring versionwithoutproduct functionNo• communication functionNo• other measurement functionNoNet Weight0.811 kgCurrentmarking / according to UL 489 / 100%-rated breakeroperational currentNo• at 40 °C80 A• at 45 °C78 A• at 50 °C77 A• at 55 °C76 A	electrical endurance (switching cycles) / at 600 V	4 000
ground-fault monitoring versionwithoutproduct functionNo• communication functionNo• other measurement functionNoNet Weight0.811 kgCurrentmarking / according to UL 489 / 100%-rated breakeroperational currentNo• at 40 °C80 A• at 45 °C78 A• at 50 °C77 A• at 55 °C76 A		No
• communication functionNo• other measurement functionNoNet Weight0.811 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current80 A• at 40 °C80 A• at 45 °C78 A• at 50 °C77 A• at 55 °C76 A	ground-fault monitoring version	without
• other measurement functionNoNet Weight0.811 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational currentNo• at 40 °C80 A• at 45 °C78 A• at 55 °C76 A	•	No
Net Weight0.811 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current		
Current       No         marking / according to UL 489 / 100%-rated breaker       No         operational current       80 A         • at 40 °C       80 A         • at 45 °C       78 A         • at 50 °C       77 A         • at 55 °C       76 A		
marking / according to UL 489 / 100%-rated breakerNooperational current80 A• at 40 °C80 A• at 45 °C78 A• at 50 °C77 A• at 55 °C76 A		
operational current         80 A           • at 40 °C         80 A           • at 45 °C         78 A           • at 50 °C         77 A           • at 55 °C         76 A		No
• at 40 °C     80 A       • at 45 °C     78 A       • at 50 °C     77 A       • at 55 °C     76 A		
• at 45 °C       78 A         • at 50 °C       77 A         • at 55 °C       76 A	1	80 A
• at 50 °C 77 A • at 55 °C 76 A		
• at 55 °C 76 A	● at 50 °C	77 A
• at 60 °C 74 A	● at 55 °C	76 A
	● at 60 °C	74 A

● at 65 °C	73 A
• at 70 °C	72 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	55 kA
• at 415 V	36 kA
• at 690 V	5 kA
breaking capacity operating short-circuit current (Ics)	
• at 240 V	55 kA
• at 415 V	36 kA
• at 690 V	5 kA
short-circuit current making capacity (Icm)	
• at 240 V	121 kA
• at 415 V	75.6 kA
• at 690 V	7.5 kA
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter
Switching capacity according to UL 489	
breaking capacity current	
• at 240 V	65 kA
● at 480 V	25 kA
• at 600 Y/347 V	14 kA
Adjustable parameters	
product feature / for L-tripping / selectable characteristic function	No
type of value list setting current (Ir) / for L-tripping / with I2t characteristic	St
reference value setting current (Ir) / for L-tripping / with I2t characteristic	x In
set values setting current (Ir) / for L-tripping / with I2t characteristic	0.8;0.9;1
adjustable response factor setting current (Ir) / for L- tripping / with I2t characteristic / minimum	0.8
adjustable response factor setting current (Ir) / for L- tripping / with I2t characteristic / maximum	1
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / minimum	64 A
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / maximum type of value list delay time (tr) / for L-tripping / with I2t	80 A Fest
characteristic reference value delay time (tr) / for L-tripping / with I2t	
characteristic set values delay time (tr) / for L-tripping / with 12t	s 1
characteristic adjustable response value delay time (tr) / for L-tripping /	1 1 s
adjustable response value delay time (tr) / for L-tripping / adjustable response value delay time (tr) / for L-tripping /	1 s
with I2t characteristic / maximum product feature / for S-tripping / independent of direction /	No
selectable characteristic function product feature / for I-tripping / can be switched on/off	No
design of I-trip / adjustable	Yes
reference value setting current (li) / for I-tripping	x In
set values setting current (li) / for I-tripping	5;6;7;8;9;10
adjustable response factor setting current (li) / for l- tripping / minimum	5
adjustable response factor setting current (li) / for l- tripping / maximum	10
adjustable response value setting current (li) / for I-tripping / minimum	400 A
adjustable response value setting current (li) / for I-tripping / maximum	800 A
product feature / for G-tripping / selectable characteristic function	No

product feature / with neutral conductor protection / can be switched on/off	No
product feature / with neutral conductor protection /	Yes
adjustable type of value list setting current (InN) / for N-tripping	St
reference value setting current (InN) / for N-tripping	x In
adjustable absolute value setting current (InN) / for N- tripping / minimum	0 A
adjustable absolute value setting current (InN) / for N- tripping / maximum	0 A
tripping characteristic / of the lower tolerance band	AK_3VA5_1_80A_TM2_SuMuH_uT
tripping characteristic / of the upper tolerance band	AK_3VA5_1_80A_TM2_SuMuH_oT
let-through energy characteristic / at 240 V	DE_3VA5_1_80A_TM_line u starter_3u4p_240V
let-through energy characteristic / at 415 V	DE_3VA5_1_80A_TM_line u starter_3u4p_415V
let-through energy characteristic / at 690 V	DE_3VA5_1_80A_TM_line u starter_3u4p_690V
type of value list setting current (li) / for I-tripping	St St
tripping characteristic / of the let-through current characteristic / at 240 V	DS_3VA5_1_80A_TM_line u starter_3u4p_240V
tripping characteristic / of the let-through current characteristic / at 415 V	DS_3VA5_1_80A_TM_line u starter_3u4p_415V
tripping characteristic / of the let-through current characteristic / at 690 V	DS_3VA5_1_80A_TM_line u starter_3u4p_690V
Adjustable response value current / lg min.	56 A
adjustable current response value current / of the current-	80 A
dependent overload release / full-scale value	
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
product component	
<ul> <li>undervoltage release</li> </ul>	No
<ul> <li>voltage trigger</li> </ul>	No
<ul> <li>trip indicator</li> </ul>	No
height [in]	5.51 in
Height	140 mm
width [in]	3 in
Type of connectable conductor cross-section, round conductor terminal, stranded	1 x (8 AWG - 3/0)
Width	76.2 mm
depth [in]	3.01 in
depth	76.5 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit Auxiliary circuit	circular conductor terminal on both sides
	0
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	
<ul> <li>during operation / minimum</li> </ul>	-25 °C
<ul> <li>during operation / maximum</li> </ul>	70 °C
<ul> <li>during storage / minimum</li> </ul>	-40 °C
during storage / maximum	80 °C
Certificates	
reference code / according to IEC 81346-2	Q
General Product Approval	
<u>Confirmation</u>	Miscellaneous
(CCC) (U <sub>L</sub> )	
	UL VUE

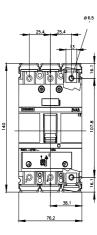


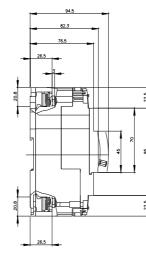
Further information

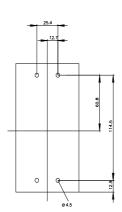
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5180-4EF36-0AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA5180-4EF36-0AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5180-4EF36-0AA0 CAx-Online-Generator http://www.siemens.com/cax

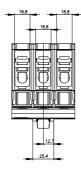
Tender specifications

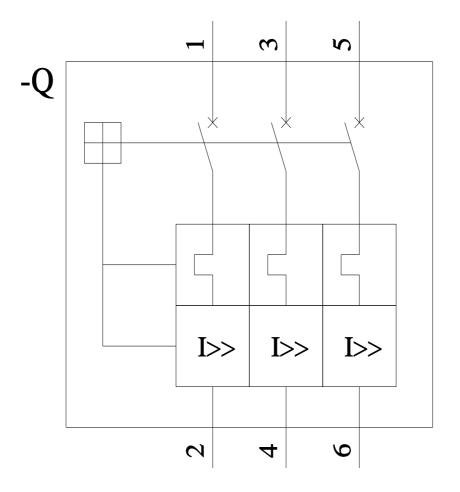
http://www.siemens.com/specifications

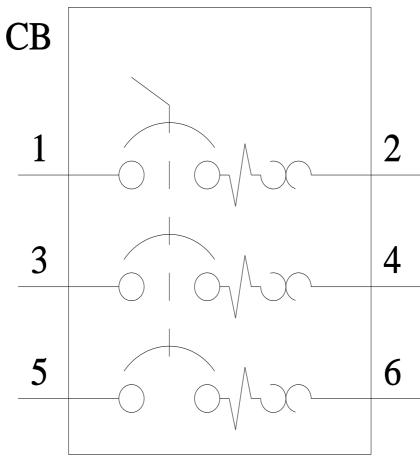












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7/15/2022 🖸