

Fixed-mounted circuit breaker IEC 60947-2, frame size 2, 3-poles, $I_n=3200A$, breaking capacity E, without internal voltage tap up to 1150V AC 50/60Hz, $I_{cu}=85/50kA$ at 1000/1150V, Trip unit ETU600 LSI upgrade ready, color display, bluetooth and USB interface, Protection LT, ST, INST, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection horizontal, with internal voltage tap on lower stab of circuit breaker and voltage tap module VTM640, U_e max. 1000 V, AC 50/60Hz, able to communication, integrated metering type PMF-3 Advanced Power Monitor., Voltage, Energy, Power, Power factor, Frequency, Unbalance, Temperature, Power quality, with manual and motorized operating mechanism (M) 208-240 V AC / 220-250 V DC, Storage status and ready-to- close signaling switches, Auxiliary switches 2NO+2NC, Closing coil (CC) 100% OP 208-240 V AC / 220-250 V DC, applicable for continuous duty, without Remote trip alarm reset coil (RR), Undervoltage release (UVR) instantaneous (0,08 s) and short-delay (0,2 s), 208-240 V AC / 220-250 V DC, without 1st Shunt trip Option F19 = COM190 COM module PROFINET IO Modbus TCP 2 switched Ethernet ports circuit breaker internal Option S07 = Locking provision against unauthorized closing Secured Open; for padlock device Padlocks are not included. Option T40 = Door sealing frame IP41

Model	
product brand name	SENTRON
product designation	Air circuit breaker
suitability for use	circuit breaker
size of the circuit-breaker	II
number of poles	3
position / of neutral conductor	no internal N-conductor
fastening method	fixed-mounted circuit breakers
design of the product	AC application
type of the driving mechanism	manual operating mechanism/spring charging motor with spring charge signaling switch
design of the electronic trip unit	ETU600 LSI
Weight	65.781 kg
Net Weight	50.781 kg
General technical data	
insulation voltage / rated value	1000 V
operating voltage / at AC / at 50/60 Hz / rated value	1000 V
power loss [W] / maximum	410 W
Current	
continuous current / rated value / maximum	3200 A
continuous current / rated value	3200 A
operational current	
• at 40 °C / rated value	3200 A
• at 45 °C / rated value	3200 A
• at 50 °C / rated value	3200 A
• at 55 °C / rated value	3200 A
• at 60 °C / rated value	3200 A
• at 65 °C / rated value	3200 A
• at 70 °C / rated value	3200 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	E
maximum short-circuit current breaking capacity (I_{cu})	
• at 500 V / rated value	85 kA
• at 690 V / rated value	85 kA
• at 1000 V / rated value	85 kA
• at 1150 V / rated value	50 kA
operating short-circuit current breaking capacity (I_{cs})	
• at 500 V / rated value	85 kA
• at 690 V / rated value	85 kA
• at 1000 V / rated value	85 kA

<ul style="list-style-type: none"> • at 1150 V / rated value 	50 kA
short-circuit current making capacity (I _{cm})	
<ul style="list-style-type: none"> • at 690 V / rated value 	187 kA
<ul style="list-style-type: none"> • at 1000 V / rated value 	187 kA
<ul style="list-style-type: none"> • at 1150 V / rated value 	105 kA
short-time withstand current (I _{cw}) / at 690 V AC	
<ul style="list-style-type: none"> • for 0.5 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 1 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	75 kA
short-time withstand current (I _{cw}) / at 1000 V AC	
<ul style="list-style-type: none"> • for 0.5 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 1 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	85 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	75 kA
short-time withstand current (I _{cw}) / at 1150 V AC	
<ul style="list-style-type: none"> • for 0.5 s / rated value 	50 kA
<ul style="list-style-type: none"> • for 1 s / rated value 	50 kA
<ul style="list-style-type: none"> • for 2 s / rated value 	50 kA
<ul style="list-style-type: none"> • for 3 s / rated value 	50 kA

Electronic release unit

product feature	
<ul style="list-style-type: none"> • upgradable 	Yes
<ul style="list-style-type: none"> • Bluetooth and USB interface 	Yes
<ul style="list-style-type: none"> • decoder for basic protection functions 	Yes
<ul style="list-style-type: none"> • display and function keys 	Yes
<ul style="list-style-type: none"> • SENTRON powerconfig configuration software 	Yes
position / for voltage tap	bottom

Basic protection functions

product feature / for L-tripping	
<ul style="list-style-type: none"> • can be switched on/off 	Yes
<ul style="list-style-type: none"> • selectable characteristic function 	Yes
<ul style="list-style-type: none"> • decoder and infinite adjustability are selectable with eSet 	Yes
set values setting current (I _r) / for L-tripping / with I2t characteristic	0.5;0.6;0.7;0.75;0.8;0.85;0.9;0.95;1.0
reference value setting current (I _r) / for L-tripping / with I2t characteristic	x I _n
set values delay time (t _r) / for L-tripping / with I2t characteristic	1;2;5;8;10;14;17;21;25
reference value delay time (t _r) / for L-tripping / with I2t characteristic	s
set values setting current (I _r) / for L-tripping / with I2t characteristic / for eSet	0.4-1;0.001
adjustable absolute value setting current (I _r) / for L-tripping / with I2t characteristic / for eSet	
<ul style="list-style-type: none"> • minimum 	1280 A
<ul style="list-style-type: none"> • maximum 	3200 A
set values delay time (t _r) / for L-tripping / with I2t characteristic / for eSet	0.5-30;0.001
set values setting current (I _r) / for L-tripping / with I4t characteristic / for eSet	0.4-1;0.001
set values delay time (t _r) / for L-tripping / with I4t characteristic / for eSet	0.5-5;0.001
reference value delay time (t _r) / for L-tripping / with I4t characteristic	s
adjustable absolute value setting current (I _r) / for L-tripping / with I4t characteristic / for eSet	
<ul style="list-style-type: none"> • minimum 	1280 A
<ul style="list-style-type: none"> • maximum 	3200 A
L: Overload protection N-conductor	
product feature / with neutral conductor protection / can be switched on/off	Yes
setting values setting current (I _{nN}) / for N-tripping	0.2-2;0.001
reference value setting current (I _{nN}) / for N-tripping	x I _n
adjustable setting current (I _{nN}) / for N-tripping	

<ul style="list-style-type: none"> • minimum 	640 A
<ul style="list-style-type: none"> • maximum 	6400 A
S: delayed short-circuit protection ST	
product feature / for S-tripping	
<ul style="list-style-type: none"> • independent of direction / can be switched on/off 	Yes
<ul style="list-style-type: none"> • independent of direction / selectable characteristic function 	Yes
<ul style="list-style-type: none"> • decoder and infinite adjustability are selectable with eSet 	Yes
S: delayed short-circuit protection ST, settings values I0t	
set values setting current (I _{sd}) / for S-tripping / with I0t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I _{sd}) / for S-tripping / with I0t characteristic	x I _r
set values delay time (tsd) / for S-tripping / with I0t characteristic	0.08;0.15;0.22;0.3;0.4
reference value delay time (tsd) / for S-tripping / with I0t characteristic	s
set values setting current (I _{sd}) / for S-tripping / with I0t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I _{sd})	
<ul style="list-style-type: none"> • at 690 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum 	68 kA
<ul style="list-style-type: none"> • at 1000 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum 	68 kA
<ul style="list-style-type: none"> • at 1150 V / for S-tripping / with I0t characteristic / for eSet / independent of direction / maximum 	40 kA
set values delay time (tsd) / for S-tripping / with I0t characteristic / for eSet / independent of direction	0.02-0.4;0.001
S: delayed short-circuit protection ST, settings values I2t	
set values setting current (I _{sd}) / for S-tripping / with I2t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I _{sd}) / for S-tripping / with I2t characteristic	x I _r
set values delay time (tsd) / for S-tripping / with I2t characteristic	0.1;0.2;0.3;0.4
set values setting current (I _{sd}) / for S-tripping / with I2t characteristic / for eSet / independent of direction	0.6-10;0.001
adjustable absolute value setting current (I _{sd})	
<ul style="list-style-type: none"> • at 690 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum 	68 kA
<ul style="list-style-type: none"> • at 1000 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum 	68 kA
<ul style="list-style-type: none"> • at 1150 V / for S-tripping / with I2t characteristic / for eSet / independent of direction / maximum 	40 kA
set values delay time (tsd) / for S-tripping / with I2t characteristic / for eSet / independent of direction	0.02-0.4;0.001
product feature / for I-tripping	
<ul style="list-style-type: none"> • can be switched on/off 	Yes
<ul style="list-style-type: none"> • decoder and infinite adjustability are selectable (with eSet) 	Yes
set values setting current (I _i) / for I-tripping	1.5;2;3;4;6;8;10;12;15
reference value setting current (I _i) / for I-tripping	x I _n
tripping factor setting current (I _{imax}) / for I-tripping	0.8
reference value setting current (I _{imax}) / for I-tripping	x I _{cs}
set values setting current (I _i) / for I-tripping / for eSet	1.5-15;0.001
adjustable absolute value setting current (I _i)	
<ul style="list-style-type: none"> • at 690 V / for I-tripping / for eSet / maximum 	68 kA
<ul style="list-style-type: none"> • at 1000 V / for I-tripping / for eSet / maximum 	68 kA
<ul style="list-style-type: none"> • at 1150 V / for I-tripping / for eSet / maximum 	40 kA
G: ground fault GF	
product feature / for G-tripping	
<ul style="list-style-type: none"> • can be switched on/off 	No
<ul style="list-style-type: none"> • selectable characteristic function 	No
Further protective functions	
protection function	
<ul style="list-style-type: none"> • maintenance mode DAS+ 	Yes
<ul style="list-style-type: none"> • second protection parameter set 	Yes
<ul style="list-style-type: none"> • directional short-circuit protection dST 	Yes

<ul style="list-style-type: none"> reverse power protection RP 	Yes
<ul style="list-style-type: none"> expanded protection function EPF 	Yes
Measuring functions	
type of measurement function	PMF-III
measurement function	
<ul style="list-style-type: none"> type according to IEC 61557-12 	Yes
<ul style="list-style-type: none"> current measurement 	Yes
<ul style="list-style-type: none"> measurement of voltage and active energy 	Yes
<ul style="list-style-type: none"> measurement of energy, performance, power factor, frequency 	Yes
<ul style="list-style-type: none"> measurement of total harmonic distortion THD-U, THD-I 	Yes
Communication	
communication function / prepared for communication (Ready4COM)	Yes
communication function	Yes
Service Life	
mechanical service life (operating cycles)	
<ul style="list-style-type: none"> without support / typical 	10000
<ul style="list-style-type: none"> with support / typical 	20000
electrical endurance (operating cycles)	
<ul style="list-style-type: none"> at 690 V / without support / typical 	4000
<ul style="list-style-type: none"> at 690 V / with support / typical 	20000
<ul style="list-style-type: none"> at 1000 V / without support / typical 	1000
<ul style="list-style-type: none"> at 1150 V / without support / typical 	500
<ul style="list-style-type: none"> at 1150 V / with support / typical 	20000
Dimensions	
height	462 mm
width	460 mm
depth	357 mm
Main connection	
arrangement of electrical connectors / for main current circuit	main connection on the rear, horizontal
Auxiliary circuit	
design of the auxiliary switch	2 NO + 2 NC
number of NC contacts / for auxiliary contacts	2
number of NO contacts / for auxiliary contacts	2
number of CO contacts / for auxiliary contacts	0
Internal accessories	
product component	
<ul style="list-style-type: none"> undervoltage release 	Yes
<ul style="list-style-type: none"> voltage trigger 	No
<ul style="list-style-type: none"> trip indicator 	Yes
<ul style="list-style-type: none"> motor drive 	Yes
Electronic Accessories	
product component	
<ul style="list-style-type: none"> communication module 	COM190
Environmental conditions	
protection class IP / on the front	IP41
ambient temperature / during operation	
<ul style="list-style-type: none"> minimum 	-40 °C
<ul style="list-style-type: none"> maximum 	70 °C
ambient temperature / during storage	
<ul style="list-style-type: none"> minimum 	-40 °C
<ul style="list-style-type: none"> maximum 	80 °C
Certificates	
reference code	
<ul style="list-style-type: none"> according to IEC 81346-2 	Q
Further information	

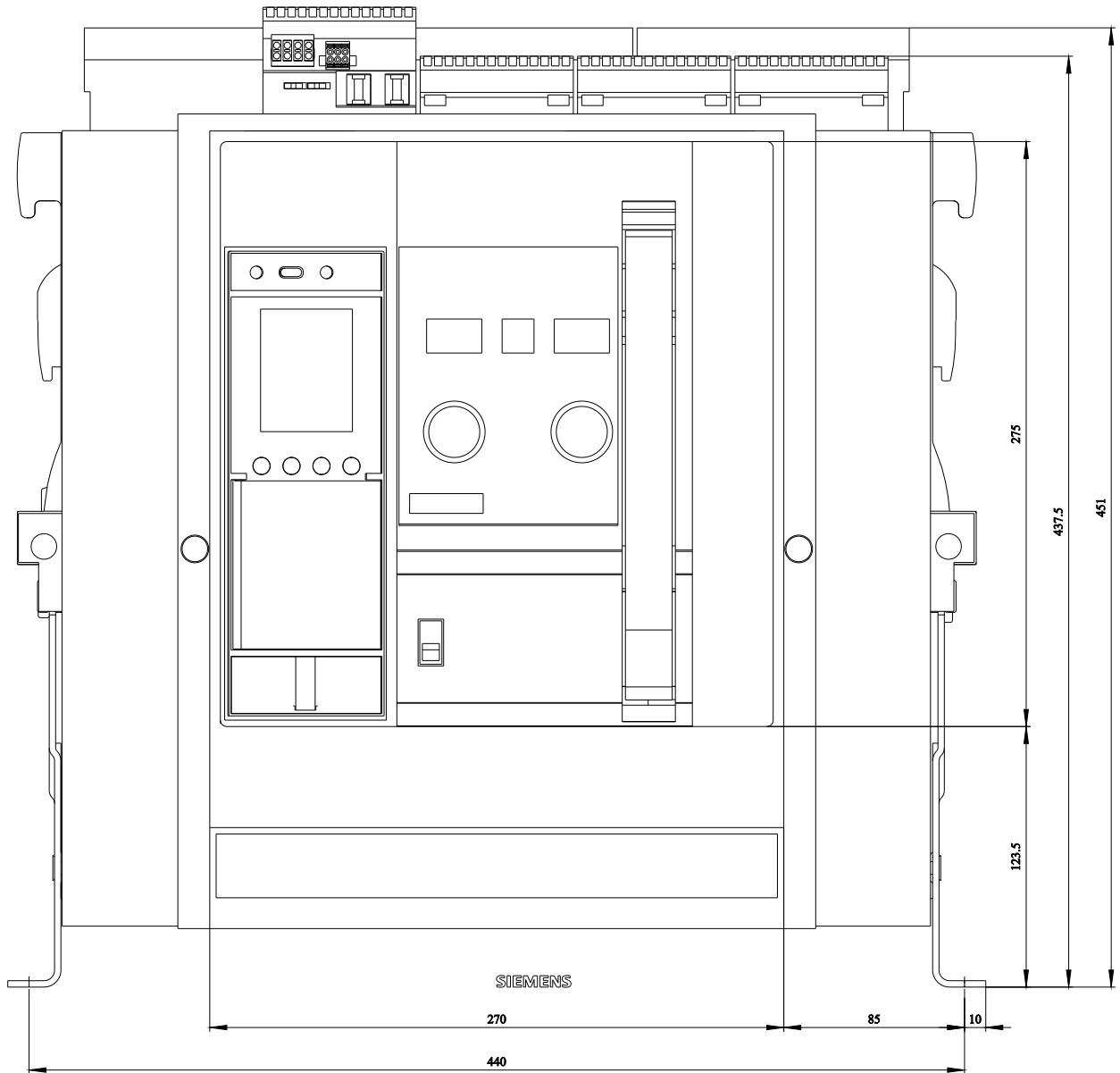
Information on the packaging

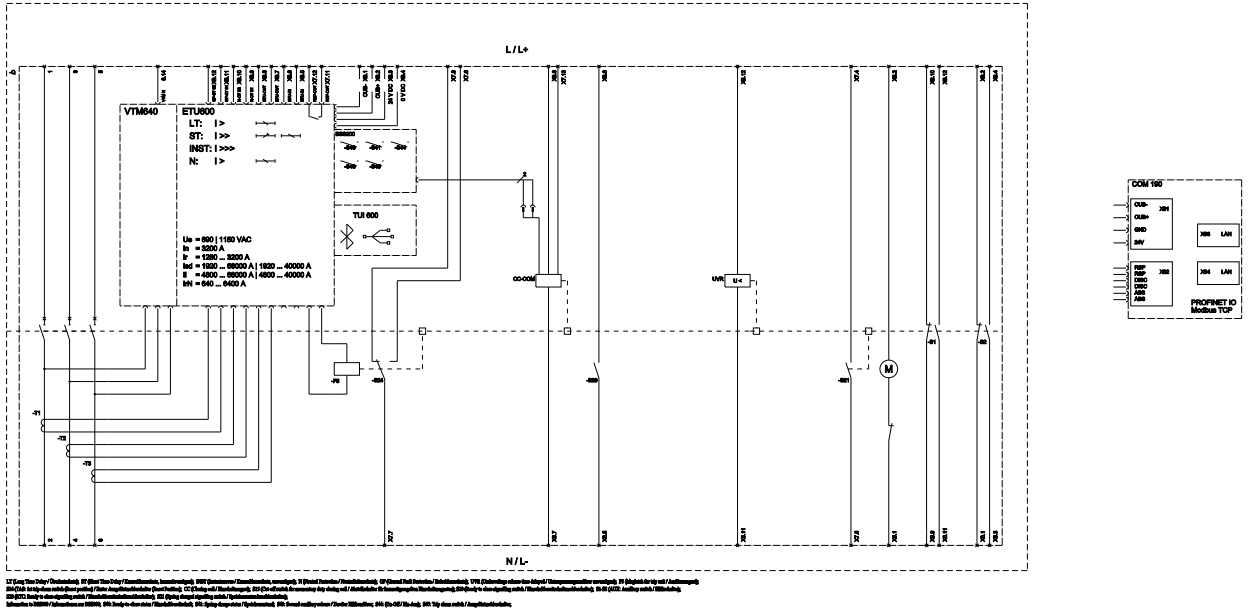
<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WA1232-8SE02-4EQ0-Z F19+S07+T40>

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





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