

SIPLUS HCS300I CURRENT/ VOLTAGE DETECTION MODULE
(UM) I = 2.4 - 25 A



General information	
Product brand name	SIPLUS
Product designation	HCS300I I/U detection module I = 2.4 - 25 A
Installation type/mounting	
Mounting type	Snap-mounting on a TH 35 mm standard rail compliant with IEC 60715 or screw-mounted using additional push-in lug
Mounting position	any
Supply voltage	
Design of the power supply	Supply via base unit
Hardware configuration	
Connectable switching device	Base device, 1 expansion module, 1 decoupling module DCM
Interfaces	
Interfaces/bus type	system interface
Integrated Functions	
Measuring functions	
• Voltage measurement	Yes
• Current measurement	Yes

Measuring inputs for voltage	
— Voltage measurement range, min.	110 V
— Voltage measuring range, max.	690 V
— Operational voltage at 50 Hz AC, min.	110 V
— Operational voltage at 50 Hz AC, max.	690 V
— Operational voltage at 60 Hz AC, min.	110 V
— Operational voltage at 60 Hz AC, max.	690 V
— Relative measuring accuracy voltage	3 %
— Impulse voltage resistance	6 000 V
— Operating frequency, min.	50 Hz
— Operating frequency, max.	60 Hz
— Design of electrical connection at the measuring inputs for voltage	Screw connection with removable terminal
— Connectable conductor cross-sections, solid	1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²)
— Connectable conductor cross-sections, finely stranded with wire end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
— Connectable conductor cross-sections for AWG cables	1x (20 ... 12), 2x (20 ... 16)

Measuring inputs for current	
— Current measurement range, min.	2.4 A
— Current measurement range, max.	25 A
— Adjustable response value, current, min.	2.4 A
— Adjustable response value, current, max.	25 A
— Relative measuring accuracy current	3 %
— Operating frequency 1	50 Hz
— Operating frequency 2	60 Hz

Isolation	
Overvoltage category	III

EMC	
EMC interference emission	IEC61131: Class A; conducted and radiated: DIN EN 55011/CISPR11 (corresponds to degree of severity A)
Electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
Field-related interference acc. to IEC 61000-4-3	10 V/m (80 ... 1 000 MHz), 3 V/m (1.4 ... 2.0 GHz), 1 V/m (2.0 ... 2.7 GHz)
Conducted interference due to burst acc. to IEC 61000-4-4	2 kV power supply lines / 1 kV signal lines
Conducted interference due to surge acc. to IEC 61000-4-5	on power supply lines: 1 kV symmetric, 2 kV asymmetric; on signal lines > 30 m unshielded: 1 kV symmetric, 2 kV asymmetric, > 30 m shielded: 2 kV asymmetric
Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6	10 V (0.15 ... 80 MHz)

Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
Certificate of suitability	CE, cULus, C-TICK (RCM)
CE mark	Yes
UL approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Degree of pollution	2
Equipment marking according to EN 61346-2	F
Device tag according to DIN EN 81346-2	F
Equipment marking according to DIN 40719, expanded according to IEC 204-2, according to IEC 750	F
Ambient conditions	
Ambient temperature during operation	
• min.	-25 °C
• max.	60 °C
Ambient temperature during storage/transportation	
• Storage, min.	-40 °C
• Storage, max.	80 °C
• Transportation, min.	-40 °C
• Transportation, max.	80 °C
Air pressure acc. to IEC 60068-2-13	
• Operation, min.	795 hPa
• Operation, max.	1 080 hPa
• Storage, min.	660 hPa
• Storage, max.	1 080 hPa
• Installation altitude above sea level, max.	2 000 m
Vibrations	
• Vibration resistance during operation acc. to IEC 60068-2-6	5 ... 500 Hz, 3.5 mm amplitude, 1 g, 10 cycles, 1 octave/min
Shock testing	
• Shock resistance acc. to IEC 60068-2-27	15 g / 11 ms
Connection method	
Design of electrical connection for main circuit	straight-through transformers
Design of electrical connection for auxiliary and control circuit	Screw connection
Dimensions	
Width	45 mm

Height	85 mm
Depth	71 mm
Diameter of the feed-through opening	7.5 mm
last modified:	10/14/2016