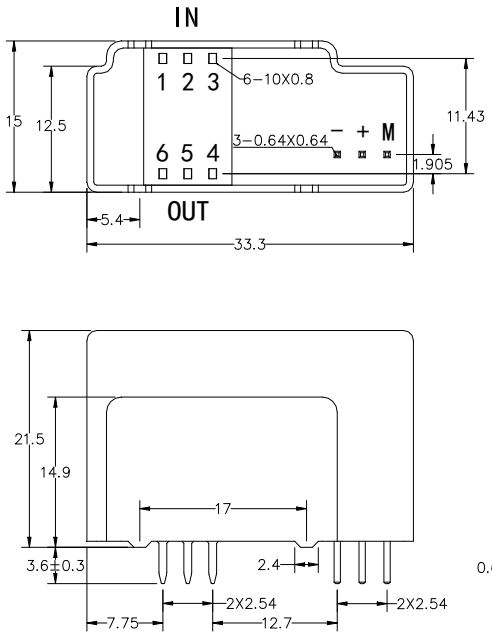
CSM025LAH Hall-effect Current Sensor

Closed loop current sensor based on the principle of Hall-effect. It can be used for Measuring AC,DC,pulsed and mixed current.

Electrical characteristics

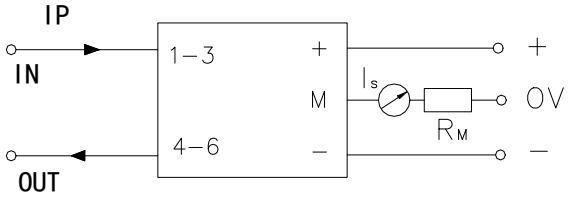
	Type		CSM025LAH	
I_{PN}	Primary nominal input current		25	A
I_P	Measuring range of primary current		0～±55	A
K_N	Conversion ratio		1-2-3：1000	
I_{SN}	Secondary nominal output current		25±0.5%	mA
R_M	Measuring resistance	@I_{PN}(DC),±12V	Rmin=100, max=420	Ω
		@I_{PN}(DC),±15V	Rmin=120, max=535	Ω
V_C	Supply voltage		±12~±15(±5%)	V
I_C	Current consumption		20+I_S	mA
V_D	Insulation voltage	AC/50Hz/1min	5.0	kV
ε_L	Linearity		<0.1	%FS
I_O	Zero offset current		±0.2	mA
I_{OT}	Thermal drift of I_0	@I_{PN}=0 T_A =-25～+85℃	<±0.005	mA/℃
T_R	Response time	@100A/μS,10%-90%	<1	us
f	Frequency bandwidth	@-3dB	DC～200	kHz
T_A	Ambient operating temperature		-25～+85	℃
T_S	Ambient storage temperature		-40～+125	℃
R_S	Secondary coil resistance	@T_A=85℃	35	Ω
m	Mass		18	g
	Standard		Q/320115QHKJ01-2013	

Dimensions of drawing (mm)



Connection

Elucidation:
−: −15V
+:+15V
M:Output



1. All dimensions are in mm.
2. General tolerance ±1mm.

Remarks

·Incorrect connection may lead to the damage of the sensor.
·I_{OUT} is positive when the I_P flows in the direction of the arrow.