

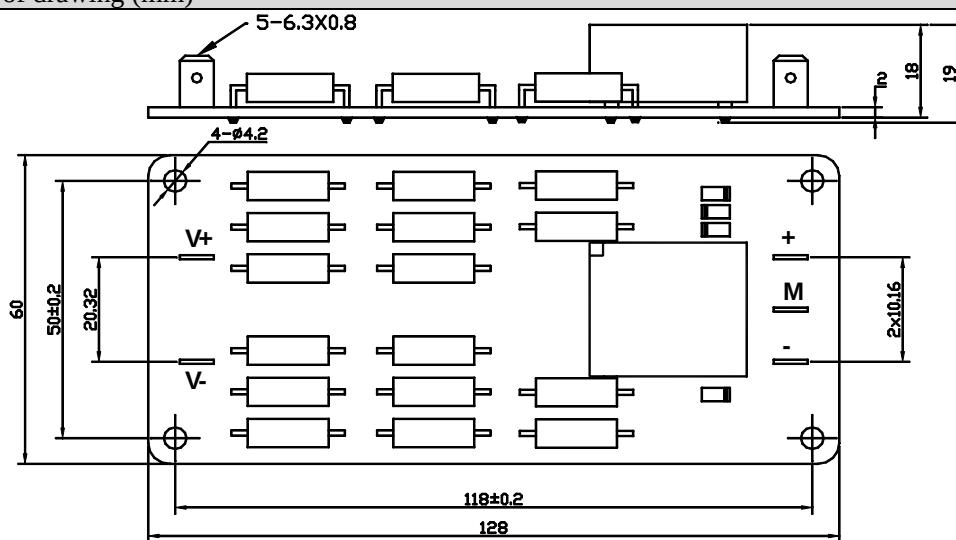
Closed loop voltage sensor based on the principle of Hall-effect.

It can be used for measuring alternating, direct, pulsed and mixed voltage

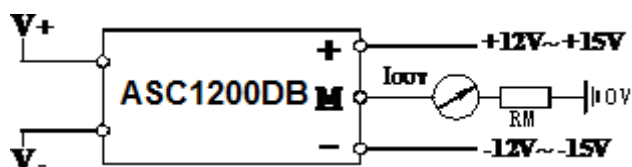
Electrical characteristics

	Type	ASC1200DB		
V_{PN}	Primary nominal input voltage	1200		V
V_P	Measuring range of primary voltage	$0 \sim \pm 1800$		V
I_{PN}	Primary nominal input current	5		mA
I_{OUT}	Secondary nominal output current	$20 \pm 1\%$		mA
K_N	Conversion ratio	1200V : 20mA		
R_M	Measuring resistance ($V_C = \pm 12V$)	$V_P = \pm 1200V$:	$30 \sim 350$	$V_P = \pm 1800V$: $30 \sim 235$
		$V_P = \pm 1200V$:	$100 \sim 460$	$V_P = \pm 1800V$: $100 \sim 315$
V_C	Supply voltage	$\pm 12 \sim \pm 15 (\pm 5\%)$		V
I_C	Current consumption	$V_C = \pm 15V$	$10 + I_{OUT}$	mA
I_0	Zero offset current	$V_P = 0$ $T_A = 25^\circ C$	$< \pm 0.2$	mA
I_{OT}	Thermal drift of I_0	$V_P = 0$ $T_A = -25 \sim +25^\circ C$	$< \pm 0.60$	mA
		$V_P = 0$ $T_A = +25 \sim +70^\circ C$	$< \pm 0.35$	mA
V_d	Insulation voltage	AC/50Hz/1min	4.1	kVrms
ϵ_L	Linearity	< 0.2		%FS
X	Accuracy	@ V_{PN} $T_A = 25^\circ C$	± 1	%
Tr	Response time	90% of V_{PN}	≤ 40	μs
T_A	Ambient operating temperature	$-25 \sim +70$		$^\circ C$
T_S	Ambient storage temperature	$-40 \sim +85$		$^\circ C$
T_{NP}	Turns ratio	4000 : 1000		$^\circ C$
P	Total primary power loss	6		W
R_1	Primary resistance	@ V_{PN} $T_A = 25^\circ C$	240	K Ω
R_S	Secondary coil resistance	@ V_{PN} $T_A = 70^\circ C$	55	Ω
m	Mass	70		g
	Special range	Other intermediate input ranges available on request		

Dimensions of drawing (mm)



Connection



Remarks

- Incorrect connection may lead to the damage of the sensor.
- I_{SN} is positive when the connection of V_P according to the top diagram.