



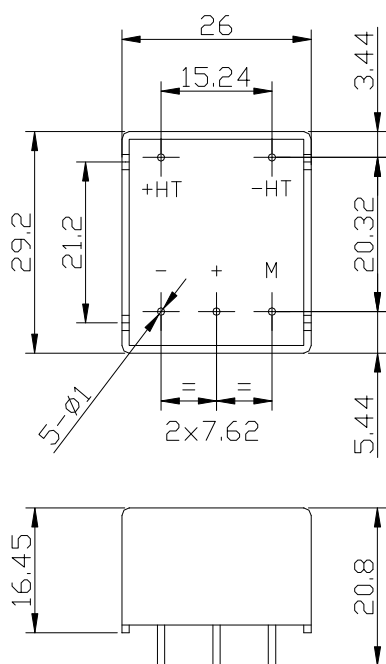
SENSOR Module CHB-25NP/SP3~4

$I_N=0.25...0.5A$

Specifications: Closed loop Hall current sensor, Nominal current 0.25...0.5A RMS for measuring of currents: AC, DC, pulsed

| Type | CHB-25NP/SP3 | CHB-25NP/SP4 |
|-----------|--|---|
| I_N | Nominal current (RMS) 0.25A | 0.5A |
| I_P | Measuring range (I_{P-P}) 0...±0.36A | 0...±0.72A |
| I_M | Output current 25mA for $I_N=0.25A$ | 25mA for $I_N=0.5A$ |
| K_N | Turns ratio 100:1000 | 50:1000 |
| R_M | Measuring resistance ($V_c = \pm 15V$) R_M min 100Ω | R_M max 190Ω (at primary nominal current I_N) |
| X | Accuracy ($T_a = +25^\circ C$) $I_N \pm 0.8\%$ | |
| V_c | Supply voltage $\pm 15V (\pm 5\%)$ | |
| V_i | Isolation voltage Between primary and secondary circuit: 2.5KV RMS/50Hz/1min. | |
| I_{off} | Offset current ($T_a = +25^\circ C$) $\pm 0.3mA$ max, for primary current $I_N=0$ | |
| T_d | Temperature drift I_M of 0.05%/°C (-25°C...+85°C) | |
| L | Linearity 0.1% | |
| T_r | Response time 10μS | |
| | di/dt | |
| f | Frequency bandwidth 0...100KHz | |
| I_c | Current consumption 10mA+ I_M (Output current) | |
| T_a | Operating temperature -25°C...+85°C | |
| T_s | Storage temperature -40°C...+90°C | |
| R_s | Secondary resistance 110Ω ($T_a = +70^\circ C$) | |
| R_N | Primary resistance <0.5Ω | |
| W | Weight 18g | |

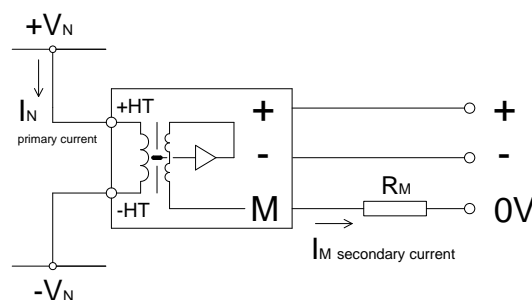
Dimensions (mm):



Primary terminals:
+HT: input current plus
-HT: input current minus

Secondary terminals:
+: supply voltage (+15V)
M: output
-: supply voltage (-15V)

Connection:



SENSOR Module is a Hall current sensor for the electronic measurement of current with a galvanic isolation between the primary and secondary circuits. By WeChat for more information.



1. Output I_M is positive, when the primary current I_N flows in the direction from pin +HT to pin -HT. 2. Mounting: PCB



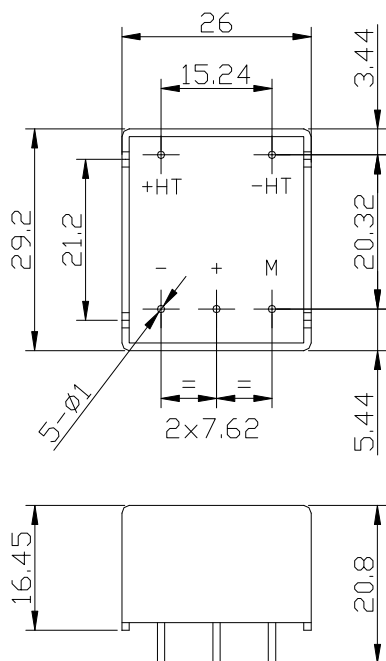
SENSOR Module CHB-25NP/SP5~9

$I_N = 1...5A$

Specifications: Closed loop Hall current sensor, Nominal current 1...5A RMS for measuring of currents: AC, DC, pulsed...

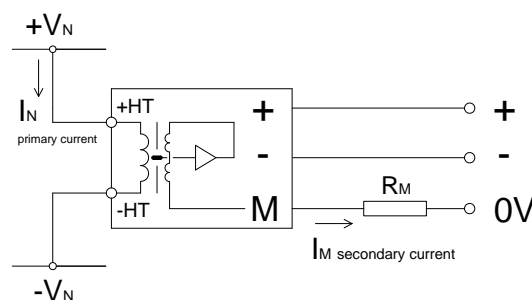
| Type | CHB-25NP/SP5 | CHB-25NP/SP6 | CHB-25NP/SP7 | CHB-25NP/SP8 | CHB-25NP/SP9 | |
|-----------|---|--|------------------------|--|------------------------|----------------------|
| I_N | Nominal current (RMS) | 1.0A | 1.5A | 2.0A | 2.5A | 5A |
| I_P | Measuring range (I_{P-P}) | 0...±1.5A | 0...±2.2A | 0...±3.0A | 0...±3.6A | 0...±6A |
| I_M | Output current | 25mA for $I_N=1.0A$ | 24mA for $I_N=1.5A$ | 24mA for $I_N=2.9A$ | 25mA for $I_N=2.5A$ | 25mA for $I_N=5A$ |
| K_N | Turns ratio | 25:1000 | 16:1000 | 12:1000 | 10:1000 | 5:1000 |
| R_M | Measuring resistance ($V_c = \pm 15V$) | R_M min | | R_M max | | |
| | | 100Ω | | 190Ω (at primary nominal current I_N) | | |
| X | Accuracy ($T_a = +25^\circ C$) | $I_N \pm 0.8\%$ | | | | |
| V_c | Supply voltage | $\pm 15V (\pm 5\%)$ | | | | |
| V_i | Isolation voltage | Between primary and secondary circuit: 2.5KV RMS/50Hz/1min. | | | | |
| I_{off} | Offset current | $\pm 0.3mA$ max, for primary current $I_N=0$ ($T_a = +25^\circ C$) | | | | |
| T_d | Temperature drift | I_M of 0.05%/°C (-25°C...+85°C) | | | | |
| L | Linearity | 0.1% | | | | |
| Tr | Response time | 10μS | | | | |
| | di/dt | | | | | |
| f | Frequency bandwidth | 0...100KHz | | | | |
| I_c | Current consumption | 10mA+ I_M (Output current) | | | | |
| T_a | Operating temperature | -25°C...+85°C | | | | |
| T_s | Storage temperature | -40°C...+90°C | | | | |
| R_s | Secondary resistance | 110Ω ($T_a = +70^\circ C$) | | | | |
| R_N | Primary resistance | <0.02Ω | | | | |
| W | Weight | 18g | | | | |

Dimensions (mm):



- Output I_M is positive, when the primary current I_N flows in the direction from pin +HT to pin -HT.
- Mounting: PCB

Connection:



Primary terminals:

- +HT: input current plus
- HT: input current minus

Secondary terminals:

- +: supply voltage (+15V)
- M: output
- : supply voltage (-15V)



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