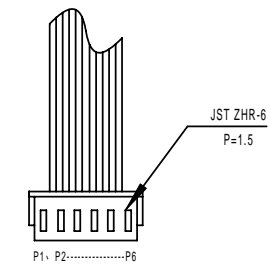
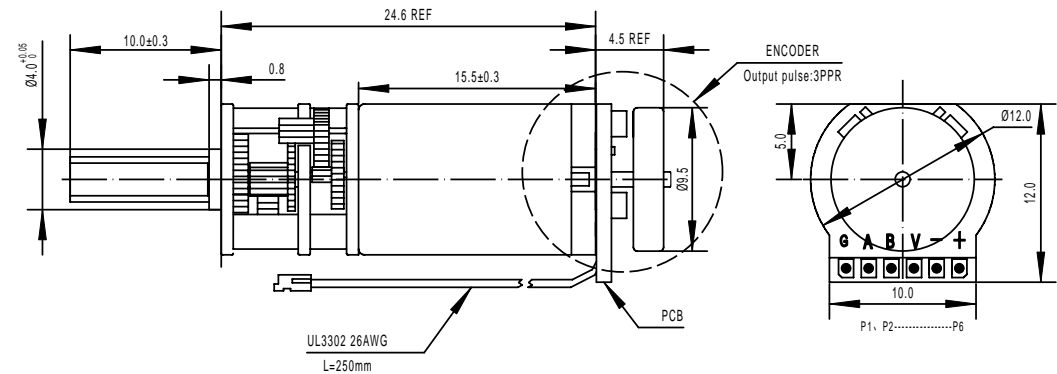
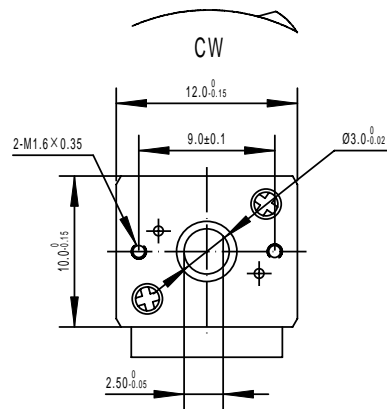


GM12-N20VA-08225-100-EN MOTOR


DIRECTION OF ROTATION



ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN.	REF.	MAX.	UNITS
Input Voltage	V <sub>cc</sub>	— — —	3.5	—	24	V
Output Saturation Voltage	V <sub>ce(sat)</sub>	V <sub>cc</sub> =14V; I <sub>c</sub> =20mA	—	300	700	mV
Output Leakage Current	I <sub>cex</sub>	V <sub>ce</sub> =14V; V <sub>cc</sub> =14V	—	<0.1	10	μV
Input Current	I <sub>ce</sub>	V <sub>cc</sub> =20V; Output open	—	5	10	mA
Output Rise Time	t <sub>r</sub>	V <sub>cc</sub> =14V; R <sub>L</sub> =820Ω; C=20pF	—	0.3	1.5	μs
Output Fall Time	t <sub>f</sub>	V <sub>cc</sub> =14V; R <sub>L</sub> =820Ω; C=20pF	—	0.3	1.5	μs

P1 GND SENSOR green  
P2 HALL SENSOR A blue  
P3 HALL SENSOR B purple  
P4 V<sub>cc</sub> brown  
P5 MOTOR - red  
P6 MOTOR + black

TITLE: GM12-N20VA-08225-100-EN	Customer No:	Drafted By: kevin Wang		
		Checked By:		
Dwg. NO:	Date: 2018.03.19	Approved By:		
TT MOTOR (HK) INDUSTRIL CO.,LTD		Scale: 2:1	Units: mm	EDITION No: A
			Angular: =1° Decimal: X.XX ±0.05	
			X.X ±0.2	
			X ±0.3	