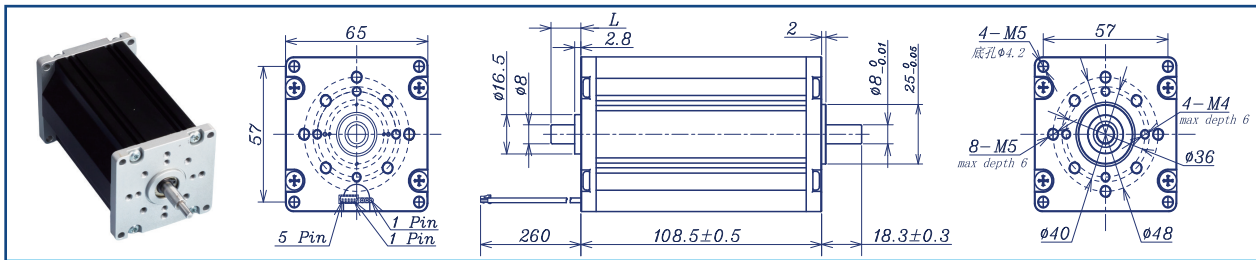


# DC BRUSHLESS MOTOR STANDARD SERIES



## AM-BL65110DN Seires

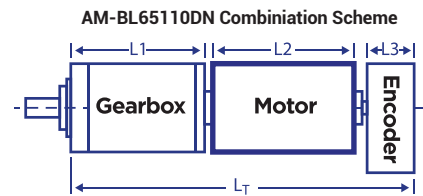


		Brushless Motor		Ball Bearings	
<b>Motor Model</b>		2404	4004		
Nominal voltage	V	24	40		
No Load Speed ±12%	rpm	3550	3600		
No load current Max 150%	mA	225	135		
Recommend Limit for continuous operating	Max cont. torque	mN.m	403.0	403.5	
	Rated Speed	rpm	3037	2922	
	Rated Current	mA	6500	3800	
	Rated Power	W	128.2	123.5	
Starting current	mA	43636	24096		
Stall torque	mN.m	2788	2638		
Maximum power output	W	259.1	238.3		
Maximum Efficiency	%	86	86		
Terminal resistance ±12%	Ω	0.55	1.66		
Inductance (1KHz)	mH		0.44		
Mechanical time constant	ms	19.8	20.4		
Moment of inertia	gcm <sup>2</sup>	1486	1486		
Torque constant	mN.m/A	64.2	110.1		
Speed constant	rpm/V	149	87		
Speed/torque gradient	rpm/mN.m	1.3	1.3		
Weight	g	1300	1308		

ADDITIONAL INFORMATION			
Motor thermal resistance:	2.6 K/W	Motor thermal time constant:	2025 S
Axial (dynamic):	30.0 N	Radial (5mm from mounting face):	180.0 N
Press-fit force (static):	150 N	Max allowable screw depth into flange:	6.0mm
Maximum radial play (5mm from mounting face):	≤0.02 mm	Axial play:	0 (<12.0N)
Maximum winding temperature:	85°C	Ambient temperature range:	-30 to 65°C
Standard Rear Shaft Diameter:	8 mm	Standard rear shaft length "L":	0/3.7/5.5 mm

Connection (AWG 18#)		Total Length: L <sub>T</sub> =L <sub>1</sub> +L <sub>2</sub> +L <sub>3</sub>			
Cable 1: Yellow	Winding A	L1:60GP	L2:BL65	L3:EN22S	L3:EN36T
Cable 2: Red	Winding B	73.5	108.5	10.7	12.0
Cable 3: Blue	Winding C				
Plug definition (AWG 28#) Molex: 51021-0500					
Plug 1: Brown	Hall 3~16V				
Plug 2: Black	Hall GND				
Plug 3: Yellow	Hall A				
Plug 4: Red	Hall B				
Plug 5: Blue	Hall C				

Remarks: Client can choose gearbox and encoder to match with this motor. Some combinations are listed here for reference.



**Recommended Gearbox:**  
Planetary Gearbox:  
AM-60GP

**Recommended Encoder:**  
Encoder S: AM-EN2211S\*\*\*  
2~3 Channels  
Encoder T: AM-EN3612T\*\*\*  
2~3 Channels

For more combination specs, visit Assun Motor website.

Motor data tested at 25°C. Motor operation exceeding continuous limits will reduce life or result in damage.  
At elevated ambient temperatures, load current must be reduced.

Download datasheet: <https://assunmotor.com/documents-download>

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