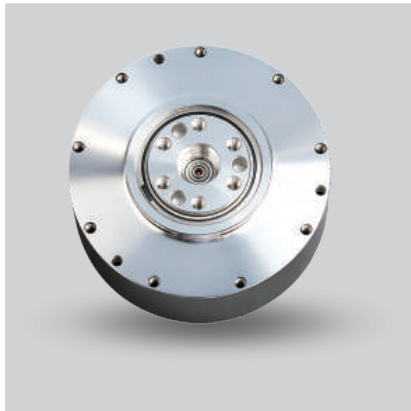


HIGH PERFORMANCE INTEGRATED MODULE JOINTS



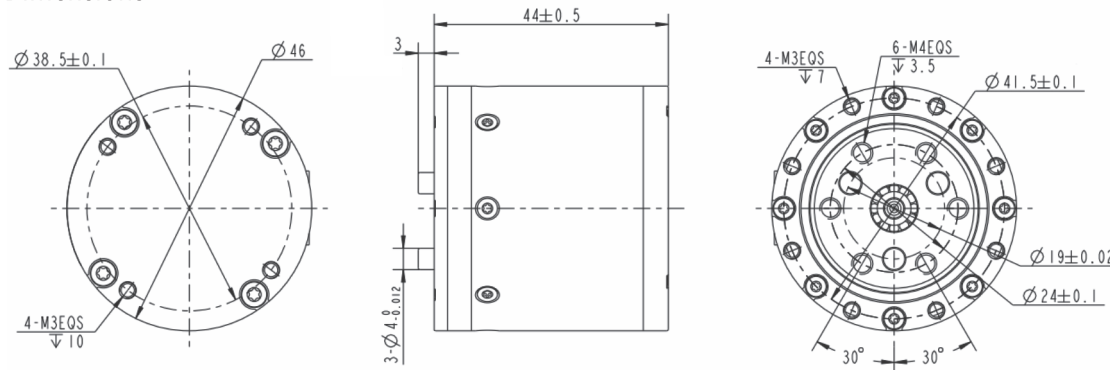
Ark Power Controls Pvt Ltd.

2026

Quasi-Direct Drive 5.5 NM Integrated Motor Module AM05-5



Dimensions

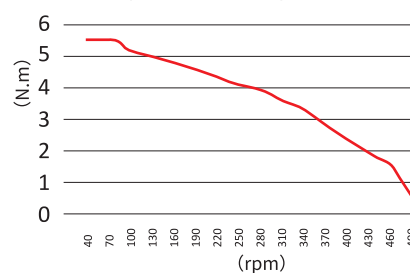


Mechanical Specs

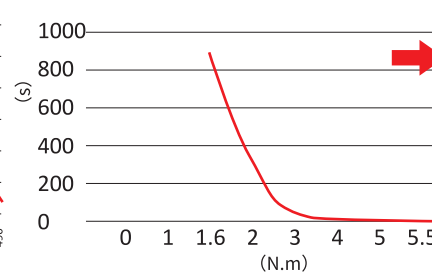
Item	Spec
Weight	191g $\pm$ 3g
Pole	20
Phase	3
Drive Method	FOC
Reduction ratio	7.75:1

Performance Curves

48V T-N (T-N under 48V)



Max Overload



Electrical Specs

Item	Spec
Magnetic Encoder	2 pcs
Rated Voltage	48V
Voltage Range	15-60V
Rated Output Power	16.7w $\pm$ 10%
Rated Torque	1.6N.m
Peak Torque	5.5N.m
Running Direction	CW/CCW
Temperature Range	-20~50°C
Humidity Range	5~85%
Storage Temperature Range	-30~70°C
Insulation Level	ClassB
No-load Speed	480 rpm $\pm$ 10%
No-load Current	0.14Arms
Rated Load Speed	100 rpm $\pm$ 10%
Rated Load Phase Current	2.4Apk $\pm$ 10%
Peak Phase Current	11Apk $\pm$ 10%
Insulation Resistance/Stator Winding	DC 500VAC, 100M Ohms
High Voltage Resistance/Stator and Casing	600VAC, 1s, 2mA
Back-EMF	7.4Vrms/rpm $\pm$ 10%
Line Resistance	2.76 Ω $\pm$ 10%
Torque Constant	0.94 N.m/Arms
Inductance	0.9 $\pm$ 20% μ H

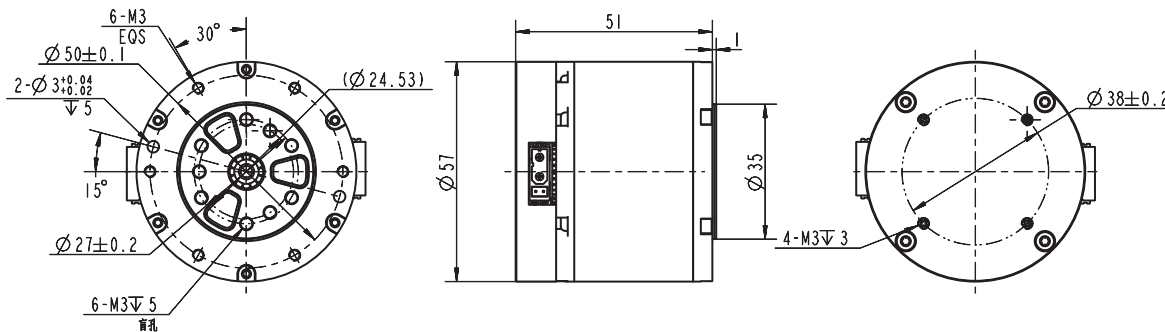
Load (N.m)	Operating Time (s)
5.5	4
5	5.5
4	12
3	41
2	300
1.6	rated

Quasi-Direct Drive 14 NM Integrated Motor Module

AM00-14



Dimensions

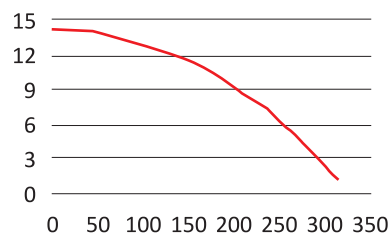


Mechanical Specs

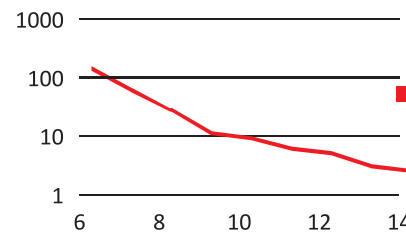
Item	Spec
Weight	310g
Pole	28
Phase	3
Drive Method	FOC
Reduction ratio	10 : 1

Performance Curves

48V T-N (T-N under 36V)



Max Overload



Electrical Specs

Item	Spec
Magnetic Encoder	2 pcs
Rated Voltage	48V
Voltage Range	24-60V
Rated Output Power	140w $\pm 10\%$
Rated Torque	5N.m
Peak Torque	14N.m
Running Direction	CW/CCW
Temperature Range	-20~50°C
Humidity Range	5~85%
Storage Temperature Range	-30~70C
Insulation Level	Class B
No-load Speed	315 rpm $\pm 10\%$
No-load Current	0.5 Arms
Rated Load Speed	260 rpm $\pm 10\%$
Rated Load Phase Current	4.7Apk $\pm 10\%$
Peak Phase Current	15.5Apk $\pm 10\%$
Insulation Resistance/ Stator Winding	DC 500VAC, 100M Ohms
High Voltage Resistance/ Stator and Casing	600VAC, 1s, 2mA
Back-EMF	0.095 Vrms/rpm $\pm 10\%$
Line Resistance	1.5+10% Ω
Torque Constant	1.48 N.m/Arms
Inductance	750 ± 20 uH

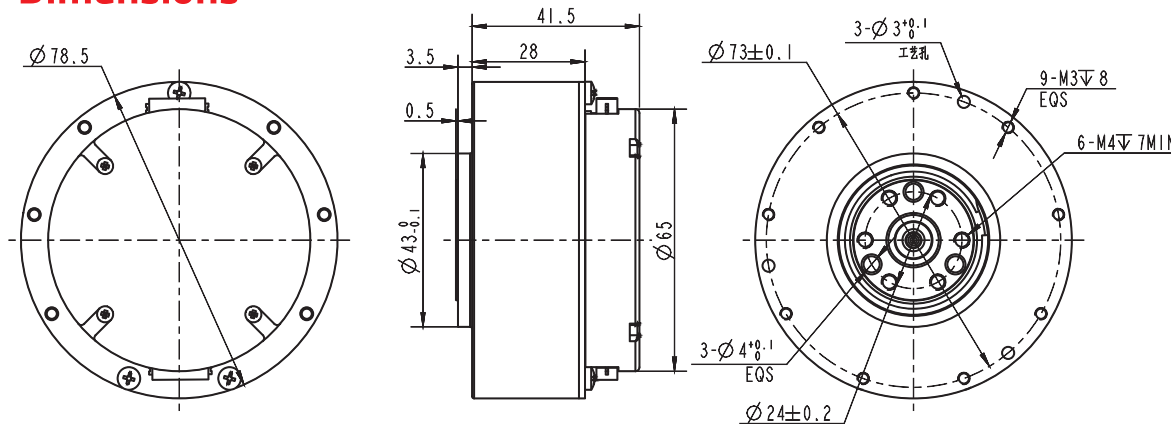
Load (N.m)	Operating Time (s)
5	rated
7	120
10	18
12	10
14	5

Quasi-Direct drive 17 NM Integrated Motor Module

AM02-17



Dimensions

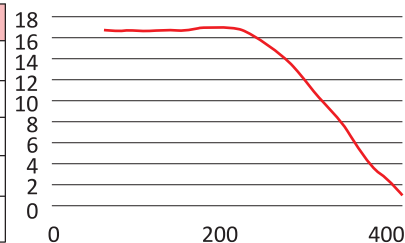


Mechanical Specs

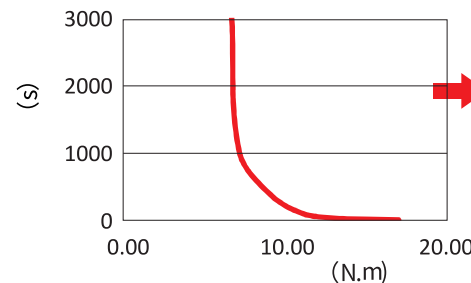
Item	Spec
Weight	405g
Pole	28
Phase	3
Method	FOC
Reduction ratio	7.75: 1

Performance Curves

48V T-N (T-N under 48V)



Max Overload



Electrical Specs

Item	Spec
Magnetic Encoder	2 pcs
Rated Voltage	48V
Voltage Range	24-60V
Rated Output Power	170w $\pm$ 10%
Rated Torque	6N.m
Peak Torque	17N.m
Running Direction	CW/CCW
Temperature Range	-20~50°C
Humidity Range	5~85%
Storage Temperature Range	-30~70C
Insulation Level	Class B
No-load Speed	410 rpm $\pm$ 10%
No-load Current	0.5 Arms
Rated Load Speed	360rpm $\pm$ 10%
Rated Load Phase Current	7Apk $\pm$ 10%
Peak Phase Current	23Apk $\pm$ 10%
Insulation Resistance/ Stator Winding	DC 500VAC, 100M Ohms
High Voltage Resistance/ Stator and Casing	600VAC, 1s, 2mA
Back-EM F	0.096 Vrms/rpm $\pm$ 10%
Line Resistance	0.55 Ω $\pm$ 10%
Torque Constant	1.22 N.m/Arms
Inductance	486 $\pm$ 20% H μ

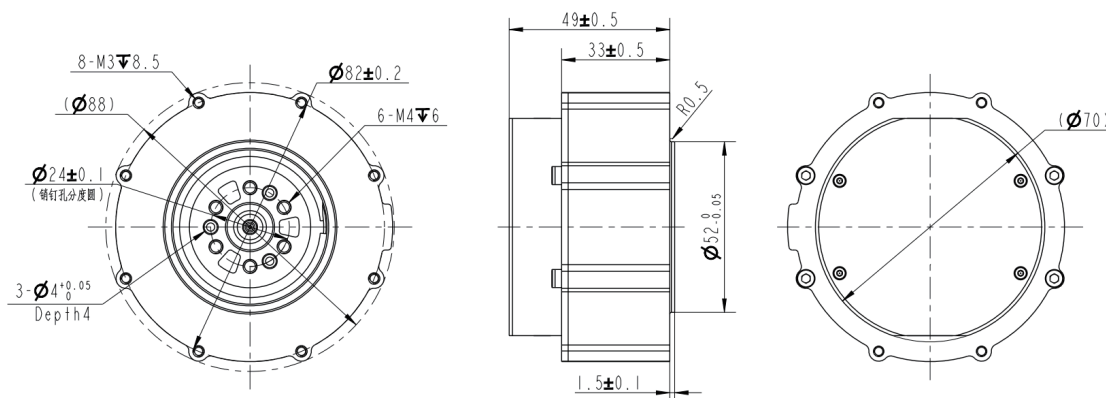
Load (N.m)	Operating Time (s)
6	rated
6.5	3000
11	100
15	18
17	10

Quasi-Direct Drive 36 NM Integrated Motor Module

AM06-36



Dimensions

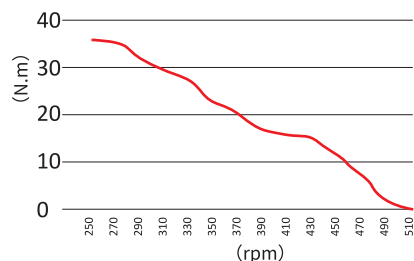


Mechanical Specs

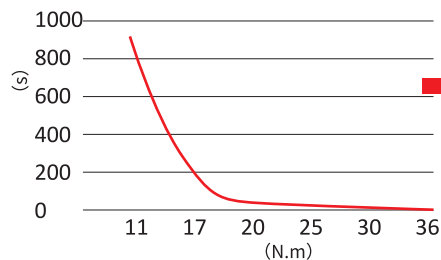
Item	Spec
Weight	621g $\pm$ 3g
Pole	28
Phase	3
Method	FOC
Reduction ratio	9:1

Performance Curves

48V T-N (T-N under 48V)



Max Overload



Electrical Specs

Item	Spec
Magnetic Encoder	2pcs
Rated Voltage	48V
Voltage Range	15~60V
Rated Output Power	115w $\pm$ 10%
Rated Torque	11N.m
Peak Torque	36N.m
Running Direction	CW/CCW
Temperature Range	-20~50°C
Humidity Range	5~85%
Storage Temperature Range	-30~70C
Insulation Level	ClassB
No-load Speed	480 rpm $\pm$ 10%
No-load Current	0.98Arms
Rated Load Speed	100rpm $\pm$ 10%
Rated Load Phase Current	14.3Apk $\pm$ 10%
Peak Phase Current	57Apk $\pm$ 10%
Insulation Resistance/Stator Winding	DC 500VAC, 100M0hms
High Voltage Resistance/Stator and Casing	600VAC, 1s,2mA
Back-EMF	7.4Vrms/rpm $\pm$ 10%
Line Resistance	0.216 Ω $\pm$ 10%
Torque Constant	1.09N.m/Arms
Inductance	0.15 $\pm$ 20% μ H

Load (N.m)	Operating Time (s)
36	4
30	8
25	18
20	36
17	200
11	rated

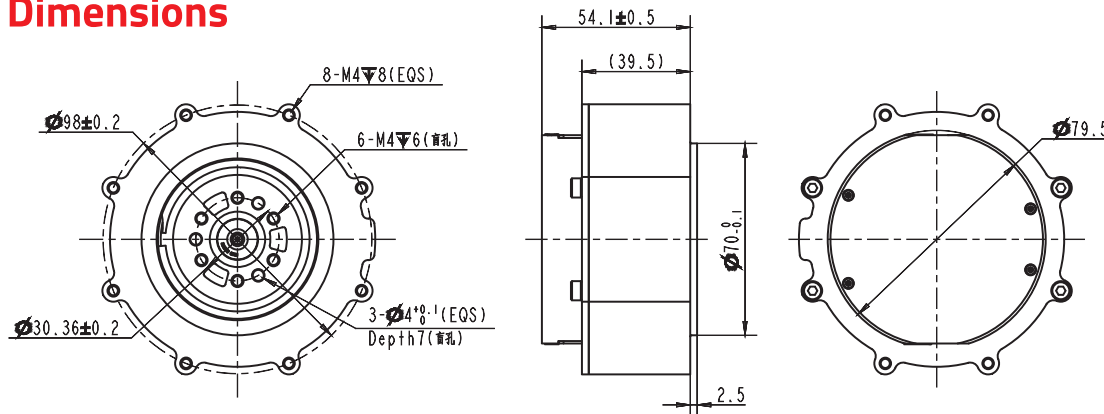
Quasi-Direct Drive 60 NM Integrated Motor Module AM03-60



Electrical Specs

Item	Spec
Magnetic Encoder	2 pcs
Voltage	48V
Voltage Range	15-60V
Rated Output Power	380W $\pm$ 10%
Rated Torque	20N.m
Peak Torque	60N.m
Running Direction	CW/CCW
Temperature Range	-20~50C
Humidity Range	5-85%
Storage Temperature Range	-30~70C
Insulation Level	Class B
No-load Speed	195rpm $\pm$ 10%
No-load Current	0.6Arms $\pm$ 10%
Rated Load Speed	180rpm $\pm$ 10%
Rated Load Phase Current	13Apk $\pm$ 10%
Peak Phase Current	43Apk $\pm$ 10%
Insulation Resistance/ Stator Winding	DC 500VAC, 100M Ohms
High Voltage Resistance/ Stator and Casing	600VAC, 1s, 2mA
Back-EM F	17Vrms/krpm $\pm$ 10%
Line Resistance	0.39 Ω $\pm$ 10%
Torque Constant	2.36N.m/Arms
Inductance	0.275mH $\pm$ 10%

Dimensions

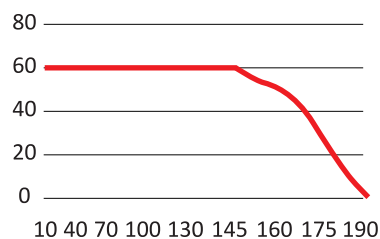


Mechanical Specs

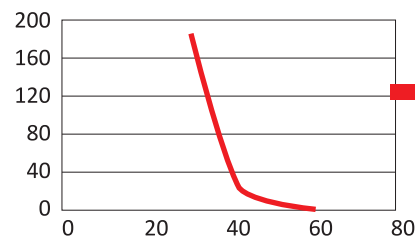
Item	Spec
Weight	900g
Pole	42
Phase	3
Drive Method	FOC
Reduction ratio	9:1

Performance Curves

48V T-N (T-N under 48V)



Max Overload



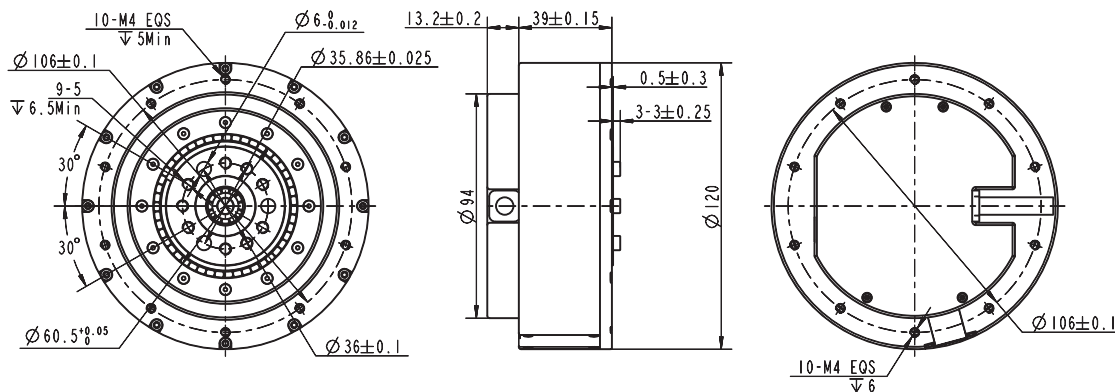
Load (N.m)	Operating Time (s)
20	rated
30	189
40	126
50	12
60	7

Quasi-Direct Drive 120 NM Integrated Motor Module

AM04-120



Dimensions

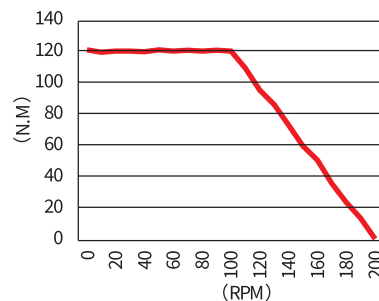


Mechanical Specs

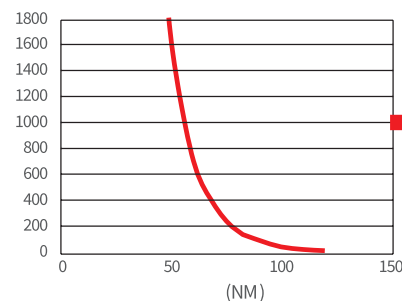
Item	Spec
Weight	1420g
Pole	42
Phase	3
Drive Method	FOC
Reduction ratio	9:1

Performance Curves

48V T-N (T-N under 48V)



Max Overload



Electrical Specs

Item	Spec
Rated Voltage	48V
Voltage Range	15-60V
Rated Output Power	700w±10%
Rated Torque	40N.m
Peak Torque	120N.m
Running Direction	CW/CCW
Temperature Range	-20~50C
Humidity Range	5~85%
Storage Temperature Range	-30~70C
Insulation Level	Class B
No-load Speed	200 rpm ±10%
No-load Current	0.7 Arms±10%
Rated Load Speed	167 rpm ±10%
Rated Load Phase Current	27Apk ±10%
Peak Phase Current	90Apk ±10%
Insulation Resistance/ Stator Winding	DC 500VAC, 100M Ohms
High Voltage Resistance/ Stator and Casing	600VAC, 1s, 2mA
Back-EM F	16.9 Vrms/krpm±10%
Line Resistance	0.16Ω ±10%
Torque Constant	2.1N.m/Arms
Inductance	0.211mH±10%

Load (N.m)	Operating Time (s)
40	rated
46	2500
70	350
80	160
120	10



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Attentions: All figures are approximate values. Variations are possible and may arise for example due to non-standardized inspection and measurement methods. For more detailed information, please contact us directly. Ark Power Controls Pvt Ltd. always reserves the right to make technical modifications.