

28 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40°C

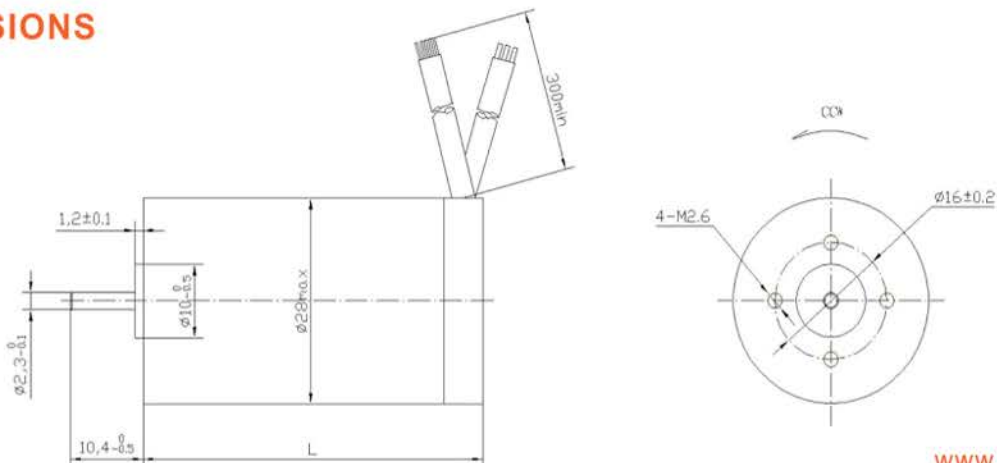
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	20AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		28DMW38-2450	28DMW43-2450	28DMW48-2450
Voltage	V	24		
Number of poles		4		
Rated power	W	6	8	10
No load speed	rpm	6000	6000	6000
Rated torque	Nm	0.01	0.015	0.02
Rated Speed	rpm	5000	5000	5000
Rated Current	A	0.5	0.8	1
Peak Torque	Nm	0.003	0.045	0.06
Weight	Kg	0.08	0.1	0.14
Length	mm	38	43	48

DIMENSIONS



36 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40°C

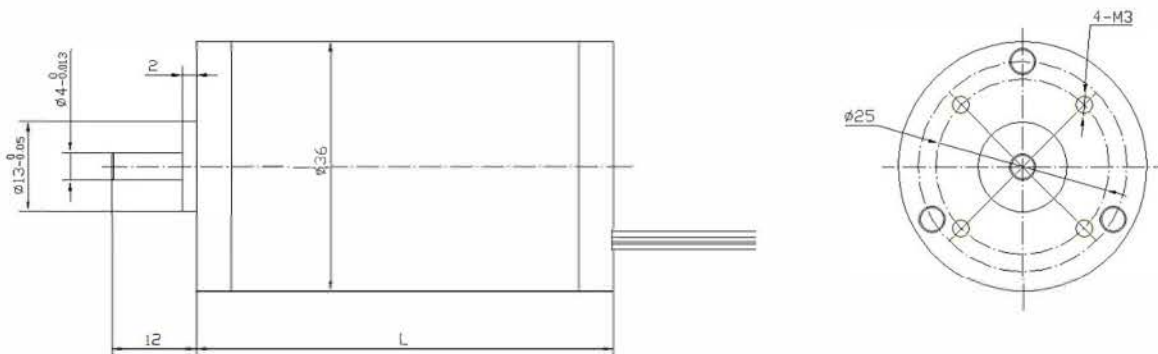
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	20AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		36DMW50-2440	36DMW55-2440	36DMW63-2440
Voltage	V	24		
Number of poles		4		
Rated power	W	20	30	40
No load speed	rpm	6000	6000	6000
Rated torque	Nm	0.04	0.06	0.08
Rated Speed	rpm	5000	5000	5000
Rated Current	A	1.3	1.8	2.3
Peak Torque	Nm	0.12	0.18	0.24
Weight	Kg	0.2	0.25	0.3
Length	mm	50	55	63

DIMENSIONS



42 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40 C

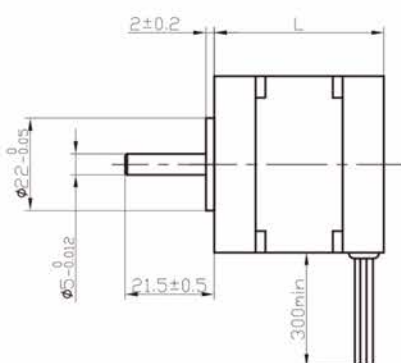
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	20AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

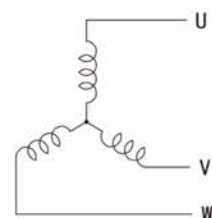
Model		42DMW41-2440	42DMW51-2440	42DMW61-2440	42DMW81-2440	42DMW101-2440
Voltage	V	24				
Number of poles		8				
Rated power	W	25	40	50	75	100
No load speed	rpm	5000	5000	5000	5000	5000
Rated torque	Nm	0.063	0.096	0.125	0.18	0.25
Rated Speed	rpm	4000	4000	4000	4000	4000
Rated Current	A	1.7	2.4	3.5	4.6	6
Torque(max)	Nm	0.19	0.23	0.38	0.57	0.75
Back-EMF constant	V/Krpm	3.13	3.13	3.15	3.16	3.17
Torque Constant	Nm/A	0.039	0.04	0.04	0.05	0.05
Resistance	ohm	1.5	1	0.74	0.56	0.4
Weight	Kg	0.3	0.4	0.5	0.7	0.9
Length	mm	41	51	61	81	101

DIMENSIONS



The diameter of axle (max): 8mm

Connection mode



42 Round SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40°C

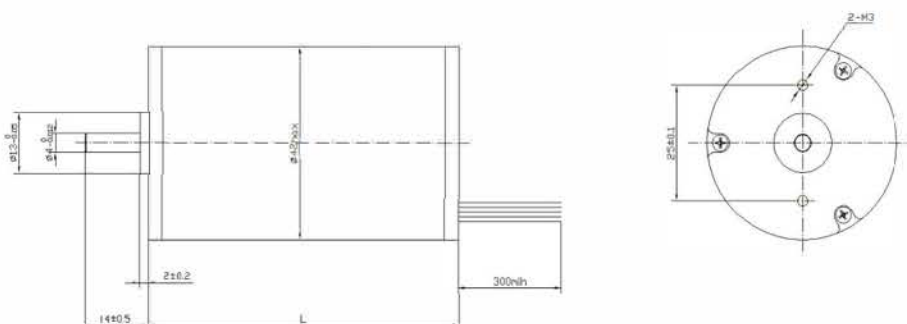
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	20AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		42DMW50-2430	42DMW60-2430	42DMW70-2430
Voltage	V	24		
Number of poles		8		
Rated power	W	30	40	55
No load speed	rpm	5000	5000	5000
Rated torque	Nm	0.07	0.1	0.13
Rated Speed	rpm	4000	4000	4000
Rated Current	A	2	2.6	4
Peak Torque	Nm	0.21	0.3	0.4
Weight	Kg	0.35	0.38	0.40
Length	mm	50	60	70

DIMENSIONS



57 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40 °C

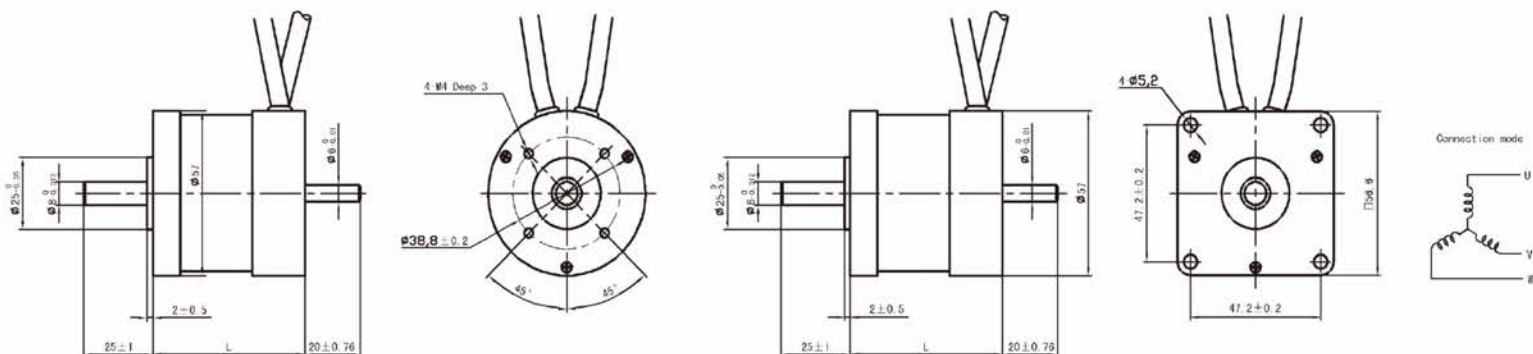
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	18AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		57DMW45-3640	57DMW55-3640	57DMW75-3640	57DMW95-3640	57DMW115-3640
Voltage	V	36				
Number of poles		4				
Rated power	W	25	50	90	130	170
No load speed	rpm	5200	5200	5200	5300	5400
Rated torque	Nm	0.055	0.11	0.22	0.32	0.42
Rated Speed	rpm	4000	4000	4000	4000	4000
Rated Current	A	1.0	1.8	3.2	4.7	6.5
Torque(max)	Nm	0.16	0.3	0.5	0.8	1.2
Back-EMF constant	V/Krpm	4.4	4.5	4.8	4.83	4.9
Torque Constant	Nm/A	0.07	0.072	0.078	0.08	0.09
Resistance	ohm	3.4	1.7	0.75	0.5	0.39
Weight	Kg	0.35	0.45	0.8	1.1	1.4
Length	mm	45	55	75	95	115

DIMENSIONS



57 SERIES BLDC Motor(High Torque)



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength:500VDC for one minute
Ambient temperature: -20—+40 C

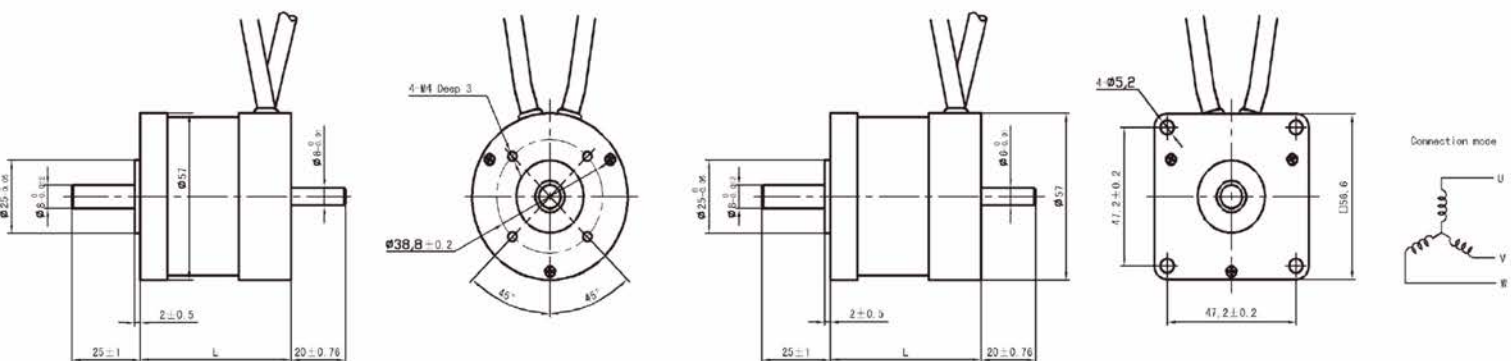
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	18AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		57DMWH55-3640	57DMWH75-3640	57DMWH95-3640	57DMWH115-3640
Voltage	V	36			
Number of poles		4			
Rated power	W	60	75	180	200
No load speed	rpm	5200	5200	5200	5200
Rated torque	Nm	0.14	0.28	0.43	0.56
Rated Speed	rpm	4000	4000	4000	4000
Rated Current	A	2.2	4.5	6.8	9
Torque(max)	Nm	0.4	0.6	0.9	1.7
Back-EMF constant	V/Krpm	4.5	4.8	4.83	4.9
Torque Constant	Nm/A	0.072	0.078	0.08	0.09
Resistance	ohm	2	0.9	0.7	0.5
Weight	Kg	0.5	0.8	1.1	1.5
Length	mm	55	75	95	115

DIMENSIONS



57 SERIES BLDC Motor (High Torque, 6 poles)



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40°C

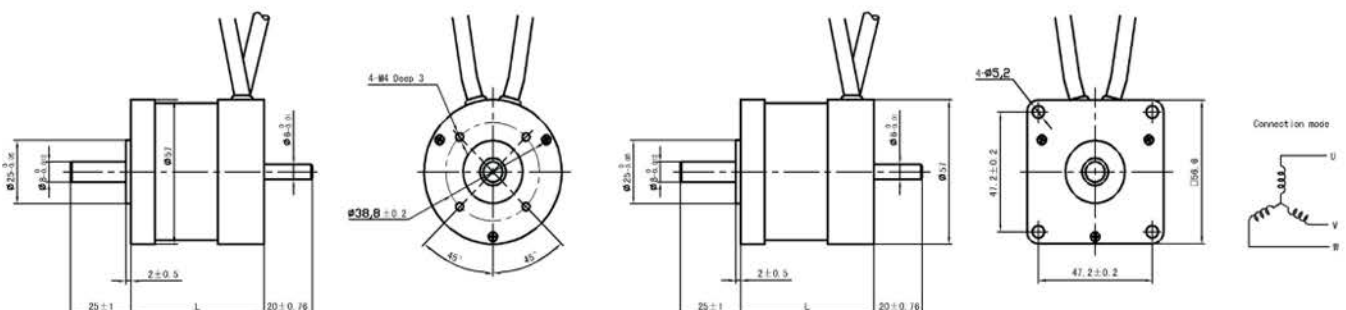
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	18AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		57DMWH54(6)-2435	57DMWH69(6)-2435	57DMWH105(6)-2435
Voltage	V	24		
Number of poles		6		
Rated power	W	70	140	260
No load speed	rpm	4700	4700	4700
Rated torque	Nm	0.2	0.37	0.7
Rated Speed	rpm	3500	3500	3500
Rated Current	A	4	8	15
Peak Torque	Nm	0.6	1.1	2.1
Weight	Kg	0.5	0.7	1.3
Length	mm	54	69	105

DIMENSIONS



60 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength:500VDC for one minute
Ambient temperature: -20—+40 °C

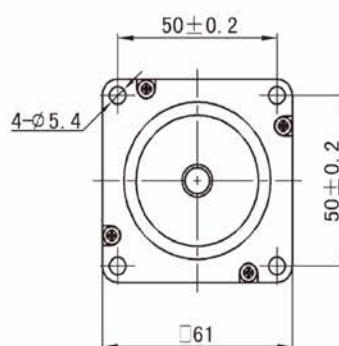
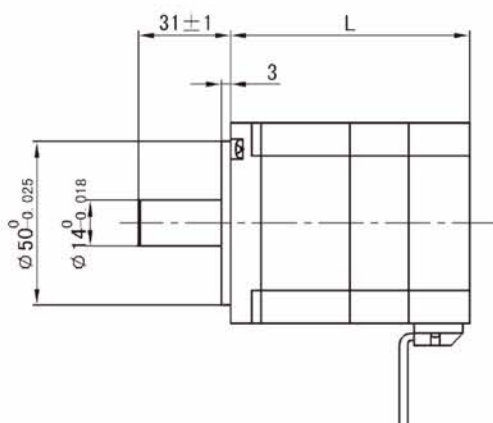
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	18AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

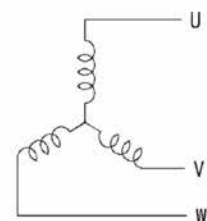
ELECTRICAL SPECIFICATION

Model		60DMW75-3630	60DMW95-3630	60DMW115-3630
Voltage	V	36		
Number of poles		8		
Rated power	W	80	160	230
No load speed	rpm	4100	4100	4100
Rated torque	Nm	0.25	0.5	0.75
Rated Speed	rpm	3000	3000	3000
Rated Current	A	3	6	9
Torque(max)	Nm	0.75	1.5	2
Back-EMF constant	V/Krpm	6.2	6.5	6.5
Torque Constant	Nm/A	0.043	0.045	0.041
Resistance	ohm	0.59	0.26	0.2
Weight	Kg	0.9	1.2	1.6
Length	mm	75	95	115

DIMENSIONS



Connection mode



70 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40 °C

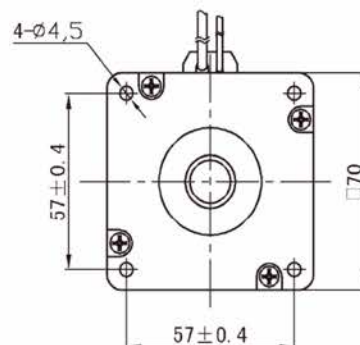
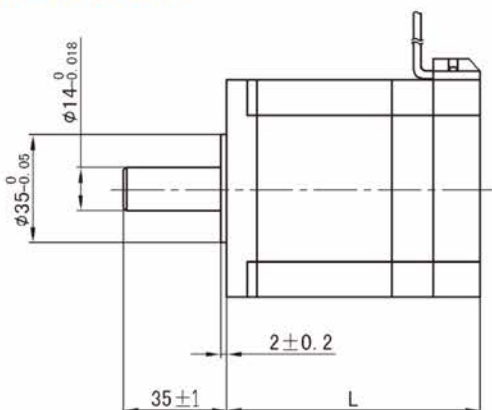
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	18AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

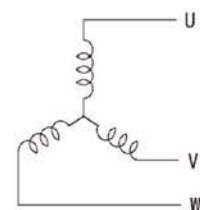
ELECTRICAL SPECIFICATION

Model		70DMW86-4830	70DMW116-4830	70DMW136-4830
Voltage	V	48		
Number of poles		8		
Rated power	W	200	350	450
No load speed	rpm	3600		
Rated torque	Nm	0.65	1.2	1.5
Rated Speed	rpm	3000	3000	3000
Rated Current	A	5.5	9.7	12.9
Torque(max)	Nm	2.1	3.6	4.5
Back-EMF constant	V/Krpm	7.1	7.3	7.5
Torque Constant	Nm/A	0.095	0.098	0.099
Resistance	ohm	1.2	0.6	0.3
Weight	Kg	1.7	2.2	2.8
Length	mm	86	116	136

DIMENSIONS



Connection mode



80 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength:500VDC for one minute
Ambient temperature: -20—+40℃

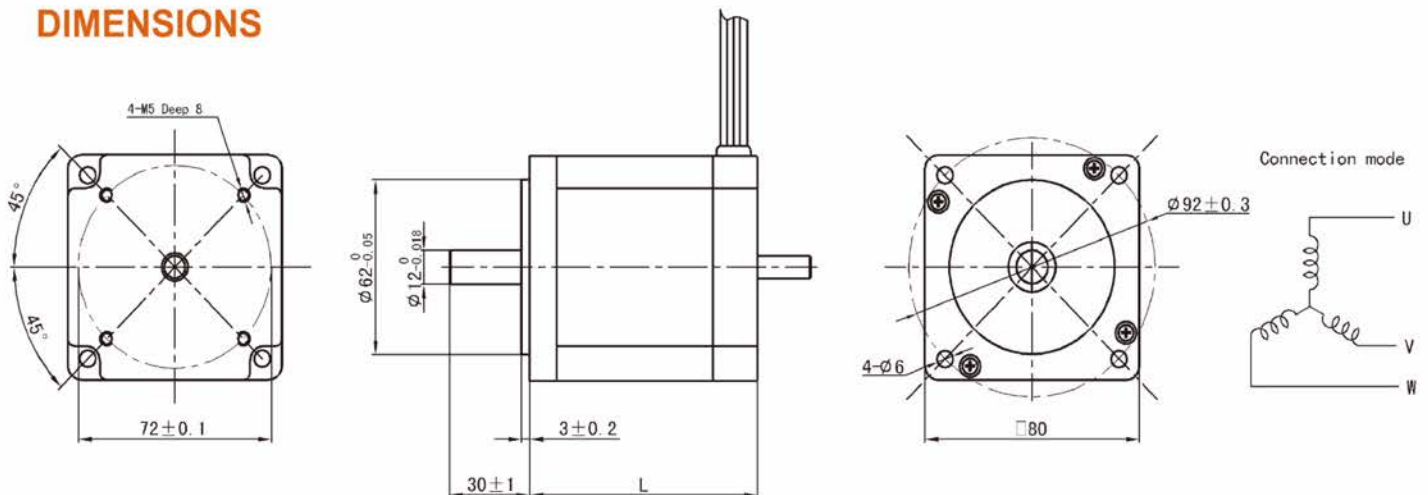
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	16AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		80DMW85-2430	80DMW105-2430	80DMW125-2430
Voltage	V	24		
Number of poles		4		
Rated power	W	100	200	300
No load speed	rpm	4200	4200	4200
Rated torque	Nm	0.32	0.65	1
Rated Speed	rpm	3000	3000	3000
Rated Current	A	5.2	10.5	15
Torque(max)	Nm	79	157	236
Back-EMF constant	V/Krpm	9	9.2	9.5
Torque Constant	Nm/A	0.06	0.052	0.05
Resistance	ohm	0.5	0.43	0.35
Weight	Kg	1.6	2.2	3
Length	mm	85	105	125

DIMENSIONS



80 SERIES ROUND BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40°C

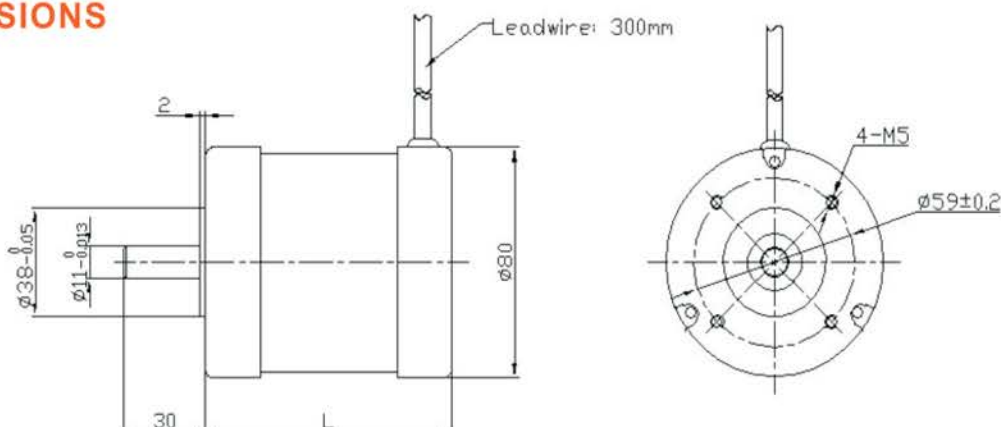
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	16AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		80DMWR58-7230	80DMWR78-7230	80DMWR98-7230
Voltage	V	72		
Number of poles		8		
Rated power	W	150	300	450
No load speed	rpm	3800	3800	3800
Rated torque	Nm	0.45	0.9	1.45
Rated Speed	rpm	3000	3000	3000
Rated Current	A	4	8	15
Peak Torque	Nm	1.35	2.7	4.35
Weight	Kg	0.9	1.2	1.5
Length	mm	58	78	98

DIMENSIONS



86 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40 °C

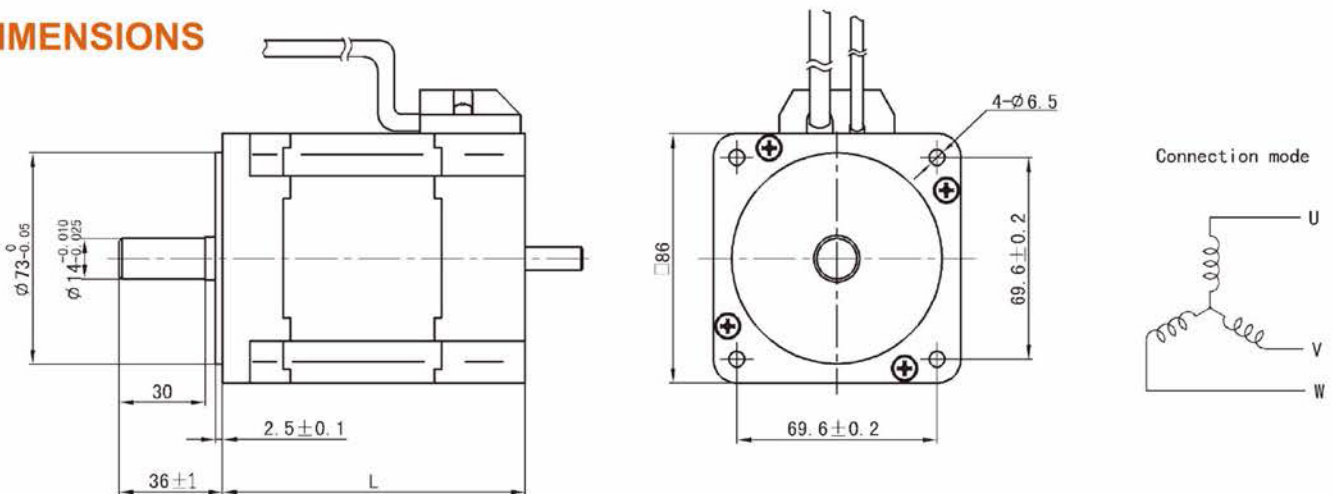
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	14AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		86DMW70-4830	86DMW80-4830	86DMW90-4830	86DMW105-4830	86DMW130-4830
Voltage	V	48				
Number of poles		8				
Rated power	W	200	300	400	550	780
No load speed	rpm	3500	3500	3500	3500	3500
Rated torque	Nm	0.67	1.0	1.3	1.8	2.5
Rated Speed	rpm	3000	3000	3000	3000	3000
Rated Current	A	5.5	8.6	11	14.8	20
Torque(max)	Nm	2	3.0	4	5.4	7.5
Back-EMF constant	V/Krpm	9.8	9.8	9.8	9.8	10
Torque Constant	Nm/A	0.13	0.13	0.13	0.13	0.14
Resistance	ohm	0.43	0.32	0.21	0.15	0.1
Weight	Kg	1.8	2.2	2.8	3.2	4.2
Length	mm	70	80	90	105	130

DIMENSIONS



110 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40 C

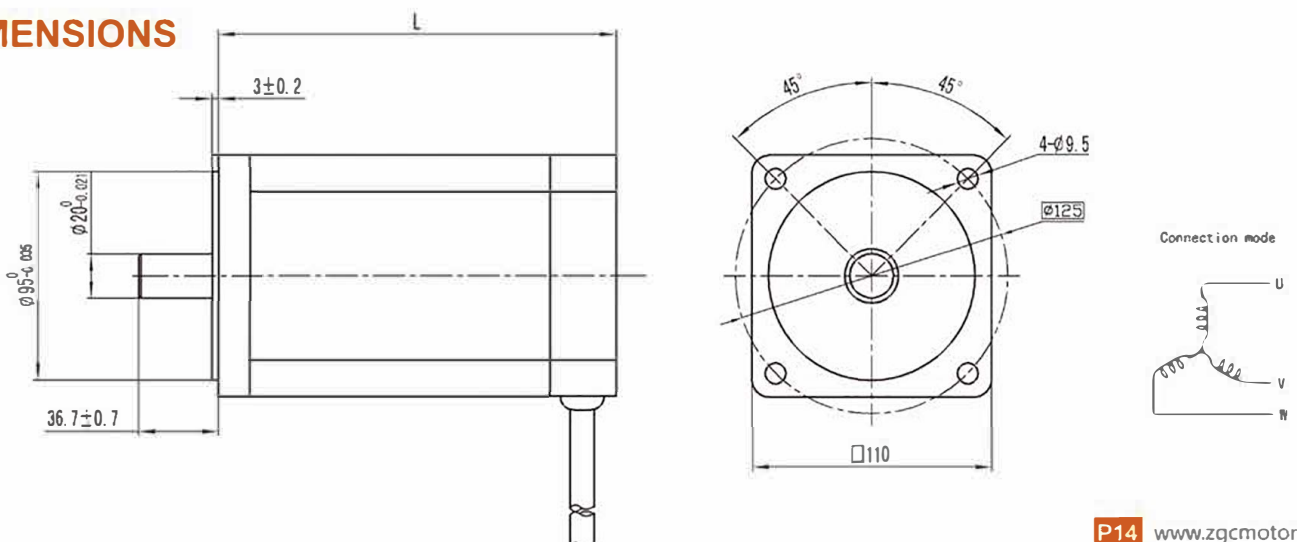
WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	14AWG UL1015	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		110DMW93-31025	110DMW123-31025	110DMW153-31024	110DMW183-31025
Voltage	V	310			
Number of poles		8			
Rated power	W	440	900	1300	1700
No load speed	rpm	2900	2900	2800	2900
Rated torque	Nm	1.65	3.30	5	6.6
Rated Speed	rpm	2550	2550	2400	2550
Rated Current	A	2	3.5	5.1	6.7
Torque(max)	Nm	6	12	18	23
Torque Constant	Nm/A	1.11	1.11	1.11	1.11
Resistance	ohm	5	2.46	1.7	1.3
Weight	Kg	4.2	5.5	6.8	8.1
Length	mm	93	123	153	183

DIMENSIONS



130 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40°C

WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	8AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		130DMW190-7230	130DMW240-7230
Voltage	V	72	
Number of poles		8	
Rated power	W	3000	4500
No load speed	rpm	3600	3600
Rated torque	Nm	9.5	14.50
Rated Speed	rpm	3000	3000
Rated Current	A	52	78
Peak Torque	Nm	28	43
Weight	Kg	10.4	13
Length	mm	190	240

DIMENSIONS

