

PRV Motors

PRV-040-400, PRV-016-100LA/HA, PRV-007-100LA/HA, PRV-007-052, PRV-002-044

Our PRV motor series comes with the following class-leading features:

- Compact in size with best-in-class power density
- Self-cooled aerodynamic design that perfectly fits the needs of the drone applications
- Optimized light-weight motors across all power ranges that vastly improves the payload performances of the drone



Motor P/N	PRV-040-400*	PRV-016-100LA /100HA	PRV-007-100LA /100HA	PRV-007-052	PRV-002-044
Rated DC voltage	400Vdc	100Vdc	100Vdc	52Vdc	44Vdc
Continuous power (S2-60 minute)	25 to 30kW	5kW	3kW	3kW	1kW
kV rating	10	43 / 65	65 / 95	105	220
Peak power (S2-2 minute)	40kW	16kW	6.72kW	7.35kW	1.955kW
Rotor poles	60	42	42	28	28
Stator slots	45	36	36	24	24
Maximum no load speed	4000rpm	4300rpm / 6500rpm	6500rpm / 9500rpm	5460rpm	9680rpm
Efficiency	>92%	>92%	>92%	>92%	>92%
Storage ambient temperature	-30°C to +75°C	-30°C to +75°C	-30°C to +75°C	-30°C to +75°C	-30°C to +75°C
Operating ambient temperature	-30°C to +60°C	-30°C to +60°C	-30°C to +60°C	-30°C to +60°C	-30°C to +60°C
Motor dimension	L: 30mm, Dia: 267mm	L: 124mm Dia: 152.7mm	L: 60mm Dia: 100mm	L: 77.2mm Dia: 109mm	L: 56.3mm Dia: 62mm
Weight	8.5Kg	4.2Kg	0.975Kg	1.2Kg	0.4Kg

Propelling up and ahead

Cooling
mechanism

Air

Natural
convection

Natural
convection

Natural
convection

Natural
convection

** Provisional data*

Related products:

Our **PRV** series best in class, small form factored drone controllers (ESC) as below:

- 1 PRV-016-100-TC
- 2 PRV-007-100-VC



Other products:

Our **KSH** series high-performance, high torque, heavy duty EV motors as below:

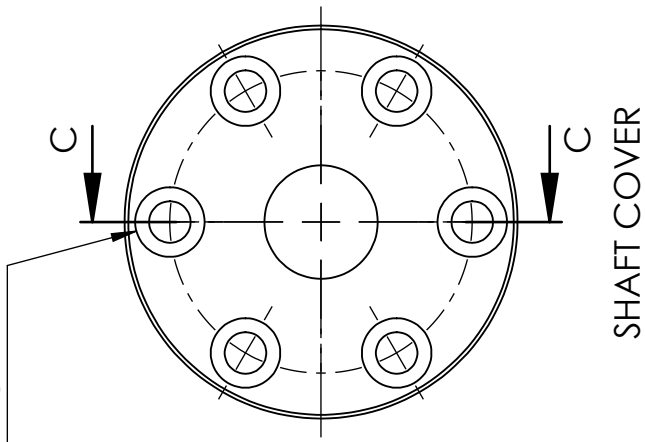
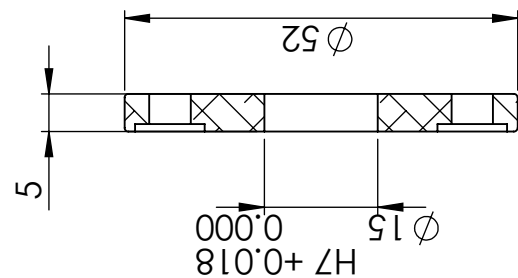
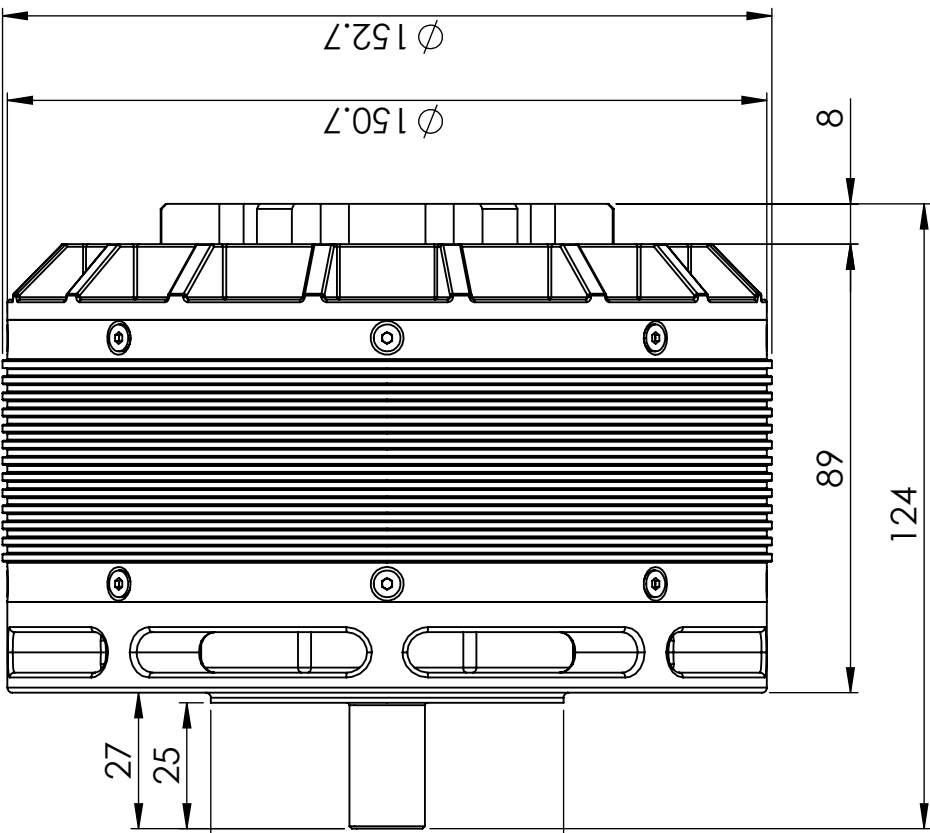
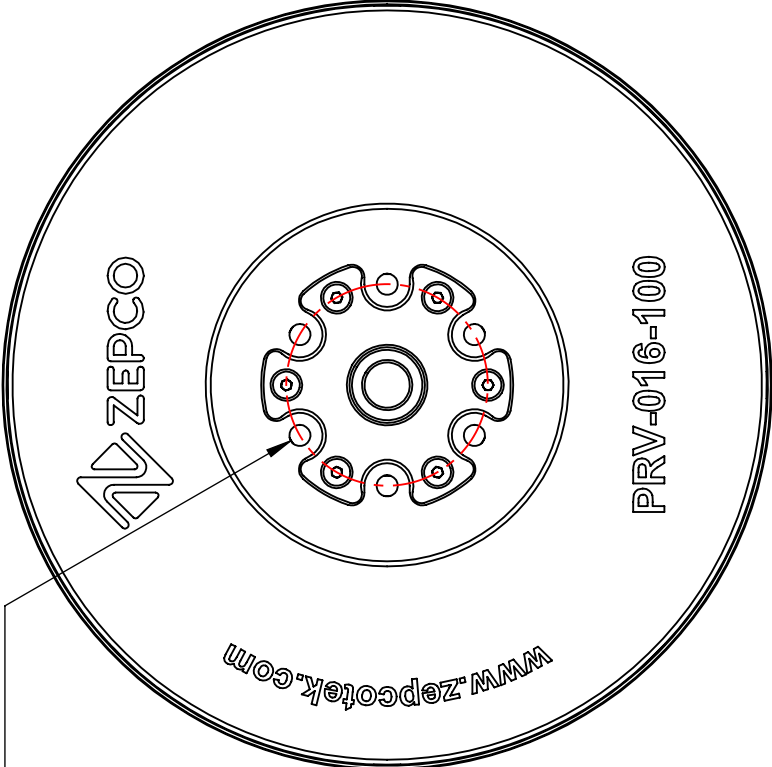
- 1 KSH-012-060
- 2 KSH-012-072
- 3 KSH-012-096
- 4 KSH-012-384



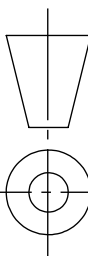
Our **KSH** series energy efficient, compact form-factored, best in class EV controllers as below:

- 1 KSH-012-048-VC
- 2 KSH-012-072-VC
- 3 KSH-012-096-VC



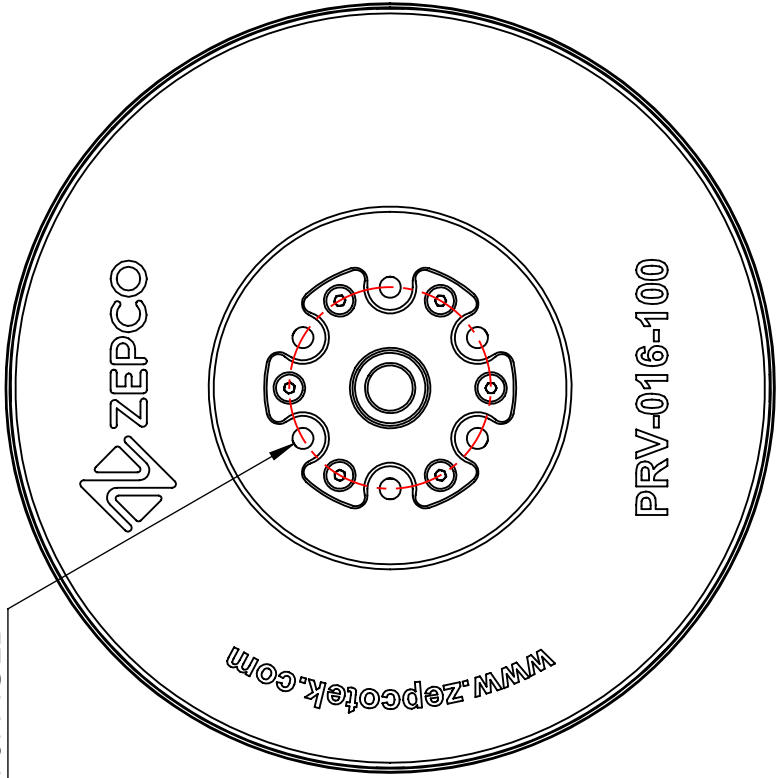


SPECIFICATIONS	
TYPE	OUTER ROTOR BLDC
TEST ITEM	KV 65
LEAD	ENAMELED WIRE 200mm
MAX POWER	16000 W
WEIGHT	4 kg
VOLTAGE	100 VDC
INTERNAL RESISTANCE	7 mΩ
CONFIGURATION	36N42P
MOTOR DIMENSION	ϕ 152.7 x 124 mm

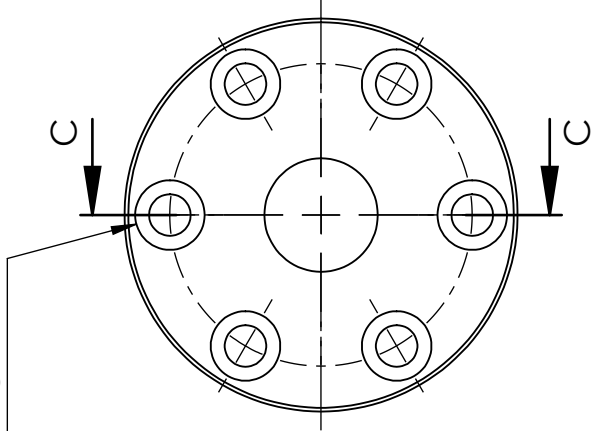
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			CHECKED	VITTAL	18-10-2024			
			ENG APPR.					
			MFG APPR.					
DEBURR AND BREAK ALL SHARP EDGES		INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5M				SIZE	DWG. NO.	REV
PROPRIETARY AND CONFIDENTIAL ALL INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ZEPKO TECHNOLOGIES PVT LTD. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ZEPKO TECHNOLOGIES PVT LTD. IS PROHIBITED.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MM TOLERANCES: REFER TO THE TABLE ABOVE.	DO NOT SCALE DRAWING		THIRD ANGLE PROJECTION	B	102000006	01
						SCALE: NTS		SHEET 1 OF 1

CONFIDENTIAL

6 x M5
PCD ϕ 40
EQUI SPACED

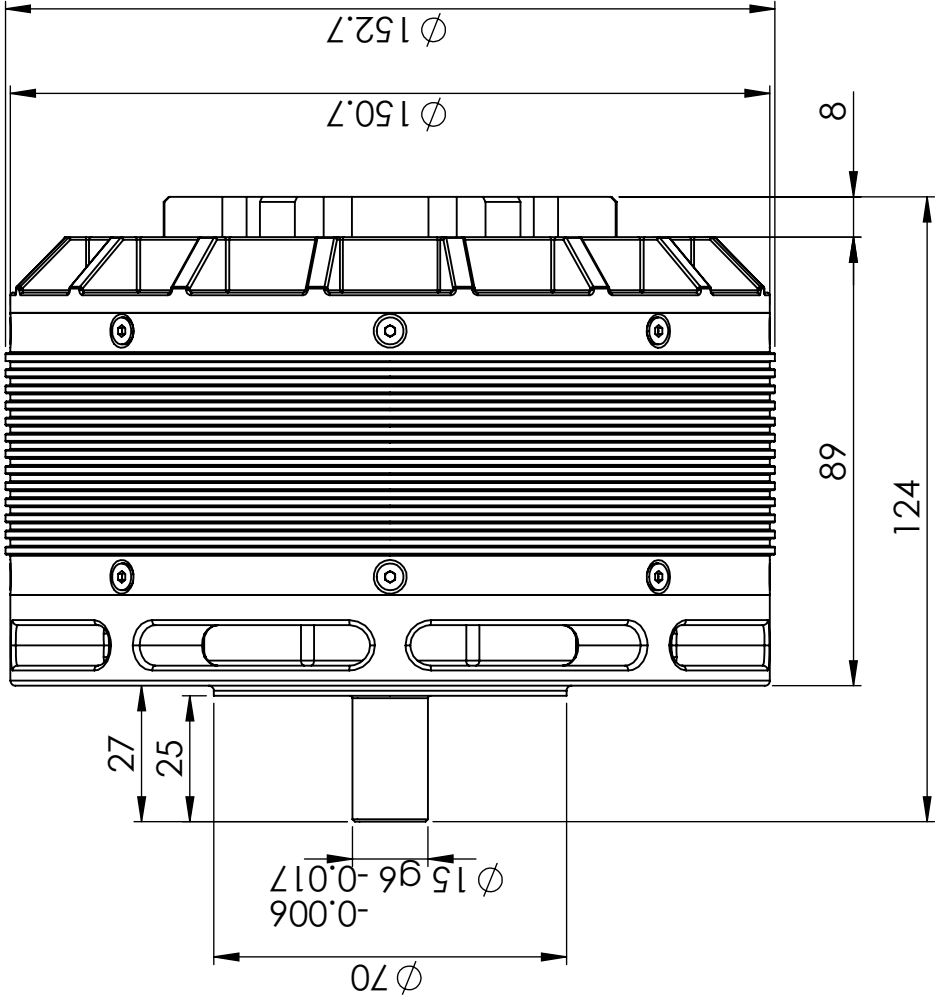


6 x ϕ 5.50 THRU ALL
└─ ϕ 9.20 ∇ 1.00
PCD ϕ 40
EQUI SPACED

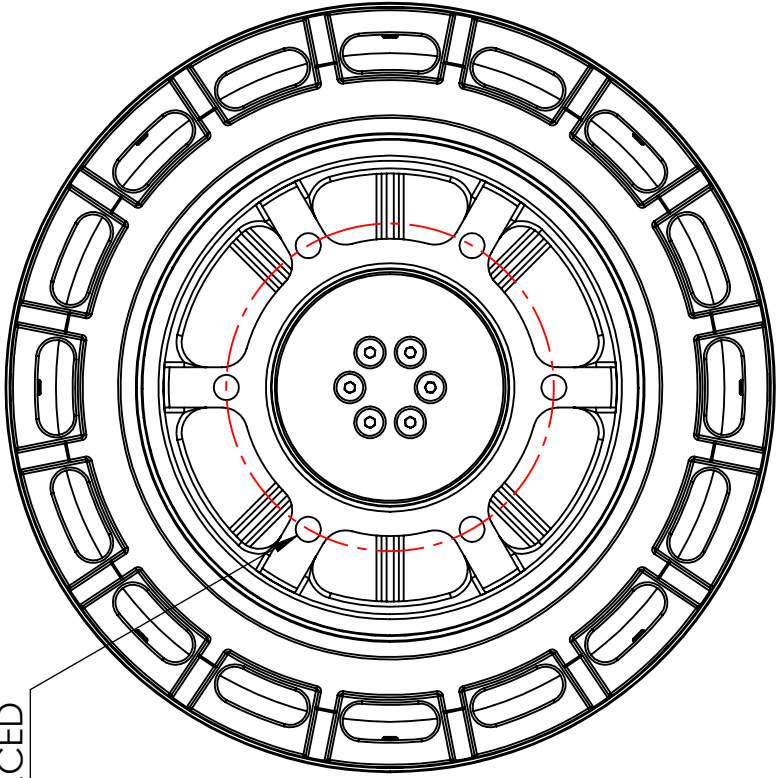


SECTION C-C
SCALE 1 : 1

SHAFT COVER



6 x M6
PCD ϕ 65
EQUI SPACED



SPECIFICATIONS	
TYPE	OUTER ROTOR BLDC
TEST ITEM	KV 43
LEAD	ENAMELED WIRE 200mm
MAX POWER	16000 W
WEIGHT	4 kg
VOLTAGE	100 VDC
INTERNAL RESISTANCE	24 m Ω
CONFIGURATION	36N42P
MOTOR DIMENSION	ϕ 152.7 x 124 mm

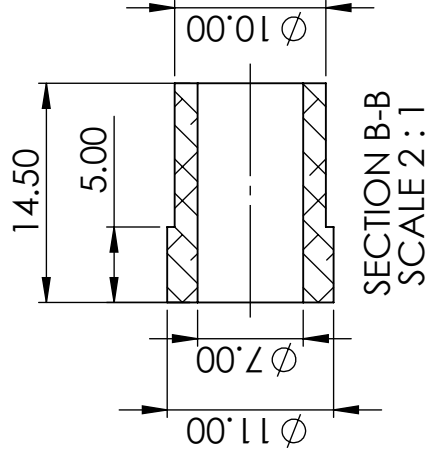
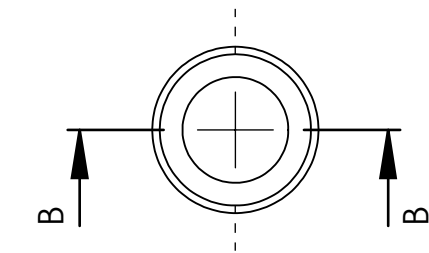
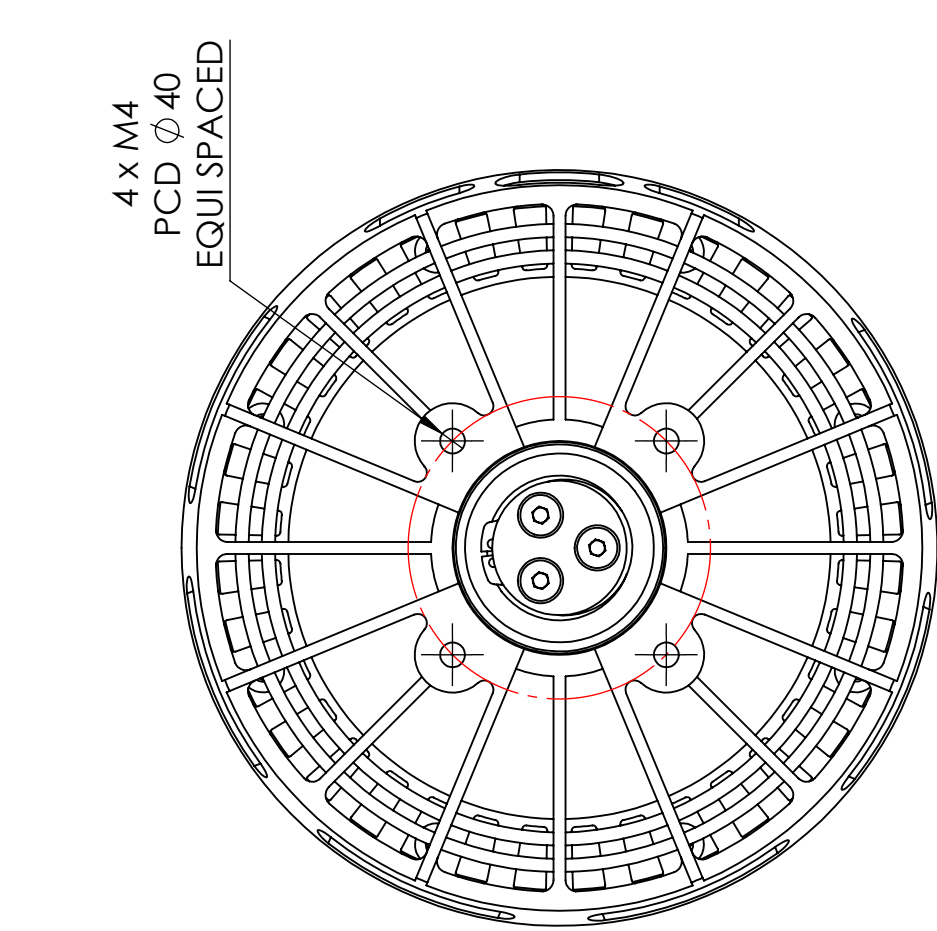
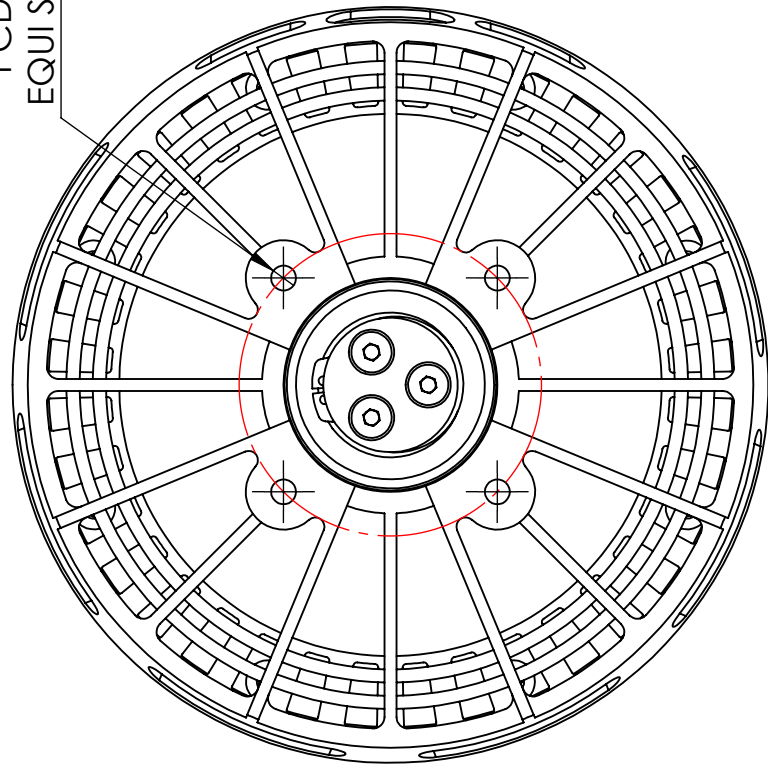


TITLE: **PRV-016-100LA**
GENERAL ASSEMBLY

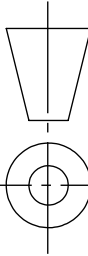
SIZE DWG. NO. REV
B 102000008 01

SCALE: NTS SHEET 1 OF 1

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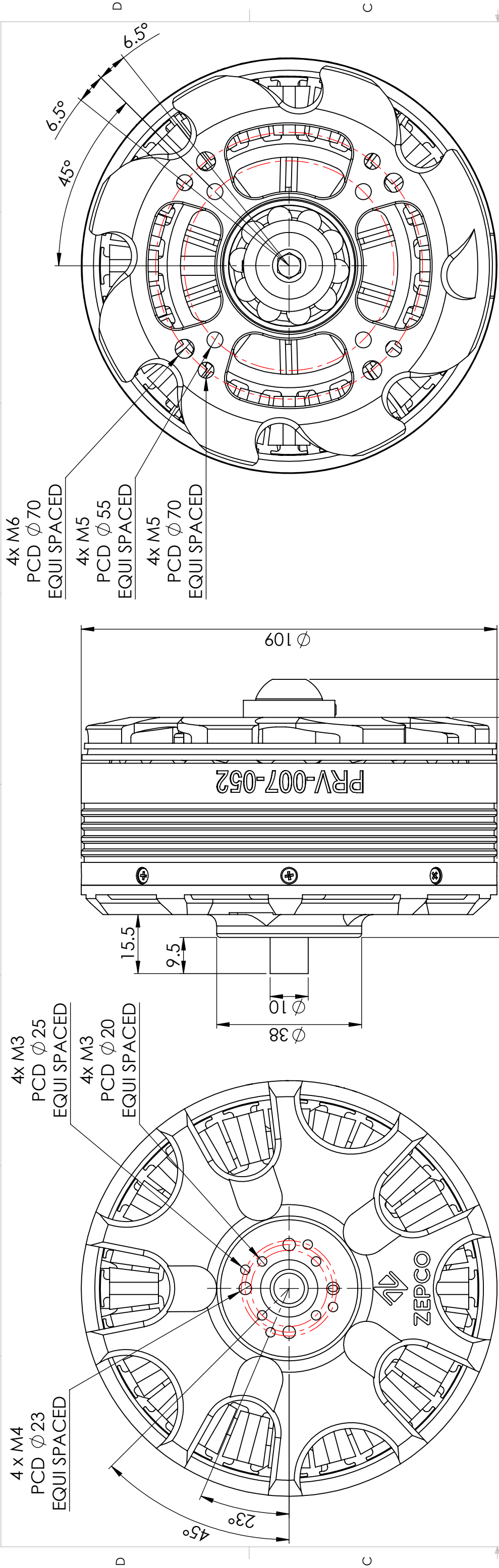


SPECIFICATIONS	
TYPE	OUTER ROTOR BLDC
TEST ITEM	KV 65
LEAD	ENAMELED WIRE 100mm
MAX POWER	6720 W
WEIGHT	975 g
VOLTAGE	100 VDC
INTERNAL RESISTANCE	76 mΩ
CONFIGURATION	36N42P
MOTOR DIMENSION	∅ 100 x 60 mm

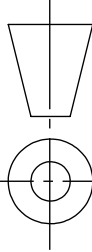
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				ENG APPR.			
				MFG APPR.			
				Q.A.			
DEBURR AND BREAK ALL SHARP EDGES		INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5M					
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		TOLERANCES:					
		REFER TO THE TABLE ABOVE.					

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SECTION A-A
SCALE 2:1



SPECIFICATIONS	
TYPE	OUTER ROTOR BLDC
TEST ITEM	KV 105
LEAD	ENAMELED WIRE 200mm
MAX POWER	7350 W
WEIGHT	1.2 kg
VOLTAGE	52 VDC
INTERNAL RESISTANCE	20 m Ω
CONFIGURATION	24N28P
MOTOR DIMENSION	$\phi 109$ x 77.2 mm

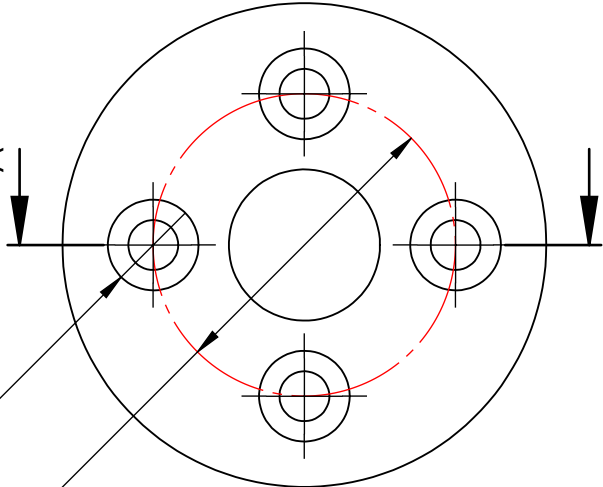
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			CHECKED		VITAL		18-10-2024
			ENG APPR.				
			MFG APPR.				
			Q.A.				
DEBURR AND BREAK ALL SHARP EDGES			INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5M				
PROPRIETARY AND CONFIDENTIAL			UNLESS OTHERWISE SPECIFIED:				
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			TOLERANCES: REFER TO THE TABLE ABOVE.				
			THIRD ANGLE PROJECTION				
							

		ZEPKO TECHNOLOGIES PVT LTD.	
TITLE: PRV-007-052			
GENERAL ASSEMBLY			
SIZE	DWG. NO.	REV	
B	102000007	01	
SCALE: NTS		SHEET 1 OF 1	

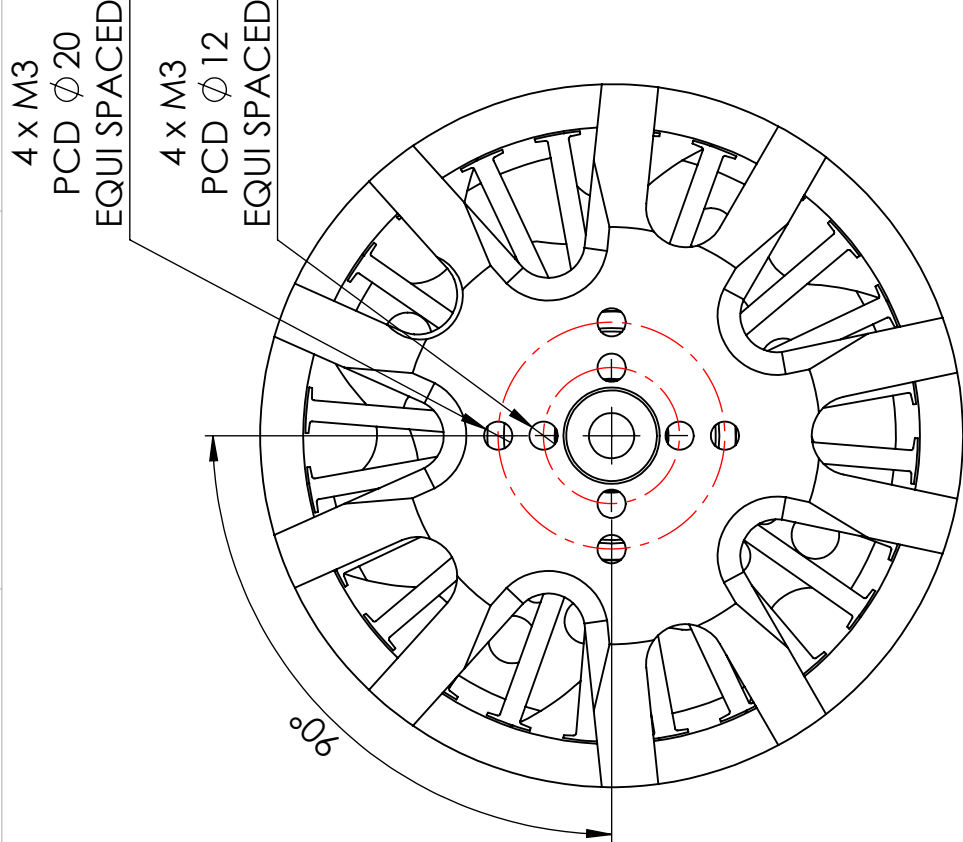


TITLE:		PRV-007-052	
GENERAL ASSEMBLY			
SIZE	DWG. NO.	REV	
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SCALE: NTS		SHEET 1 OF 1	

$\phi 3.30$ THRU
 $\phi 6.00 \pm 0.75$



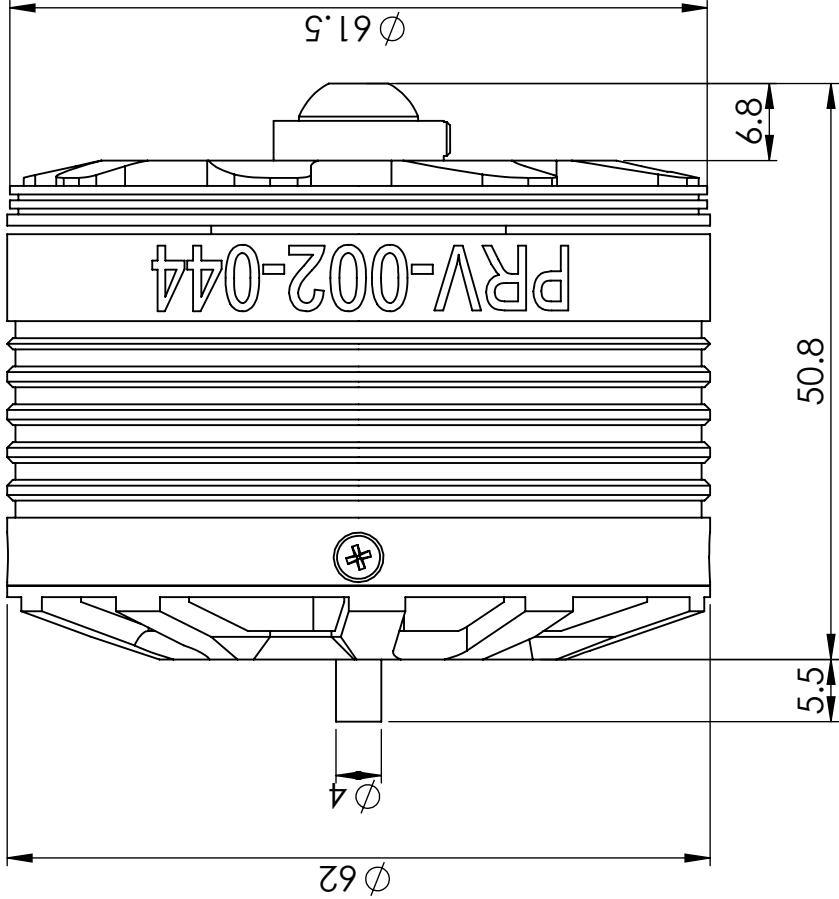
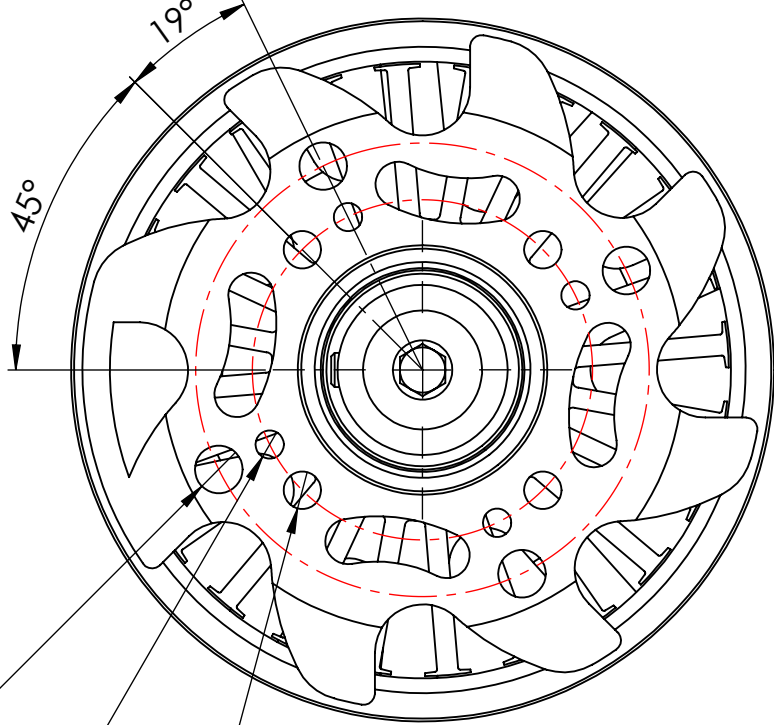
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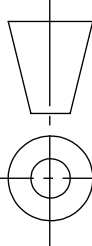
4x M5
PCD Ø40
EQUI SPACED

4x M3
PCD Ø30
EQUI SPACED

4x M4
PCD Ø30
EQUI SPACED



SPECIFICATIONS	
TYPE	OUTER ROTOR BLDC
TEST ITEM	KV 220
LEAD	ENAMELED WIRE 100mm
MAX POWER	1955 W
WEIGHT	400 g
VOLTAGE	44 VDC
INTERNAL RESISTANCE	60 mΩ
CONFIGURATION	24N28P
MOTOR DIMENSION	Ø 62 x 56.3 mm

MATERIAL	FINISH	NAME		DATE	 ZEPKO TECHNOLOGIES PVT LTD.
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		CHECKED		20-11-2024	
		ENG APPR.			
		MFG APPR.			
DEBURR AND BREAK ALL SHARP EDGES		INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5M		TITLE:	
PROPRIETARY AND CONFIDENTIAL		UNLESS OTHERWISE SPECIFIED:		GENERAL ASSEMBLY	
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		THIRD ANGLE PROJECTION		DWG. NO.	
				B	
				REV	
				01	
				SCALE: NTS	
				SHEET 1 OF 1	

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