

Motor Parameters		Symbols	Units	WTRM-360-L-034		WTRM-360-L-070		WTRM-360-L-140	
PERFORMANCE	DC Bus Voltage	V_{DC}	V	24	48	24	48	24	48
	Rated Torque	T_r	Nm	150.5		297.8		451.6	
	Peak Torque	T_{peak}	Nm	222.4		440.2		600.4	
	Rated Speed	N_r	rpm	65	165	35	100	25	75
	No-Load Speed	$N_{no-load}$	rpm	120	250	70	150	45	100
	Torque Constant	K_t	Nm/A	2.19		3.51		5.28	
	Voltage Constant	K_v	V/rpm	0.184		0.301		0.452	
	Max. Cogging Torque	T_{cog}	%			<1			
	Torque Ripple	T_{ripple}	%			<1			
	Number of Pole	$2p$	--			64			
ELECTRICAL	Rated Current	I_r	A_{rms}	68.6		84.8		85.5	
	Peak Current	I_{peak}	A_{rms}	102.9		127.2		114	
	Line Resistance	$R_{LL}@25^{\circ}C$	Ohm	0.11 ($\pm 20\%$)		0.1 ($\pm 20\%$)		0.09 ($\pm 20\%$)	
	Line Inductance	$L_{LL}@60Hz$	mH	0.44 ($\pm 30\%$)		0.56 ($\pm 30\%$)		0.59 ($\pm 30\%$)	
MECHANICAL & THERMAL	Total Weight	W_{total}	kg	14.40		25.51		47.70	
	Mech. Time Constant	K_{mech}	ms	2.58		1.90		1.51	
	Thermal Resistance ⁽²⁾	R_{th}	$^{\circ}C/W$	0.051		0.028		0.015	
	Inertia	J	$kg.m^2$	0.0919		0.1845		0.3697	
	Water Inlet Temp.	T_w	$^{\circ}C$			20			
	Water Temp. Diff. Between Inlet-Outlet	ΔT_w	$^{\circ}C$	2.6		2.7		1.5	
	Min. Water Volumetric Flow Rate	q_w	l/min	6.9		9.7		15.2	
	Pressure Drop for q_w	ΔP_w	bar	0.1535		0.1590		0.2410	
	Environment Temp.	T_{env}	$^{\circ}C$			20			
	Rotor ID	R_{ID}	mm			270			

Motor Parameters		Symbols	Units	WTRM-360-H-035		WTRM-360-H-070		WTRM-360-H-140	
PERFORMANCE	DC Bus Voltage	V_{DC}	V	310	560	310	560	310	560
	Rated Torque	T_r	Nm	186.4		373.2		741.4	
	Peak Torque	T_{peak}	Nm	316.6		632.8		1262.1	
	Rated Speed	N_r	rpm	175	350	140	280	105	210
	No-Load Speed	$N_{no-load}$	rpm	280	520	220	400	165	300
	Torque Constant	K_t	Nm/A	12.22		15.71		20.88	
	Voltage Constant	K_v	V/rpm	1.054		1.356		1.809	
	Max. Cogging Torque	T_{cog}	%			<1			
	Torque Ripple	T_{ripple}	%			<1			
	Number of Pole	$2p$	--			64			
ELECTRICAL	Rated Current	I_r	A_{rms}	15.3		23.8		35.5	
	Peak Current	I_{peak}	A_{rms}	27.5		42.8		63.9	
	Line Resistance	$R_{LL}@25^{\circ}C$	Ohm	3.38 ($\pm 20\%$)		2.1 ($\pm 20\%$)		1.54 ($\pm 20\%$)	
	Line Inductance	$L_{LL}@60Hz$	mH	15.1 ($\pm 30\%$)		11.4 ($\pm 30\%$)		9.7 ($\pm 30\%$)	
MECHANICAL & THERMAL	Total Weight	W_{total}	kg	14.40		25.51		47.70	
	Mech. Time Constant	K_{mech}	ms	2.52		1.90		1.58	
	Thermal Resistance ⁽²⁾	R_{th}	$^{\circ}C/W$	0.051		0.028		0.015	
	Inertia	J	$kg.m^2$	0.0919		0.1845		0.3697	
	Water Inlet Temp.	T_w	$^{\circ}C$			20			
	Water Temp. Diff. Between Inlet-Outlet	ΔT_w	$^{\circ}C$	4.0		4.3		4.5	
	Min. Water Volumetric Flow Rate	q_w	l/min	6.9		9.7		15.2	
	Pressure Drop for q_w	ΔP_w	bar	0.1535		0.1590		0.2410	
	Environment Temp.	T_{env}	$^{\circ}C$			20			
	Rotor ID	R_{ID}	mm			270			

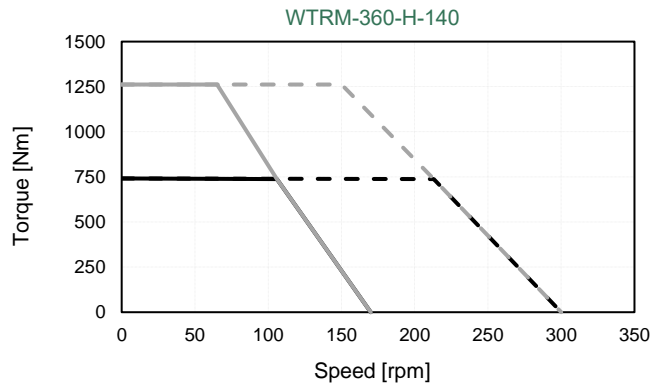
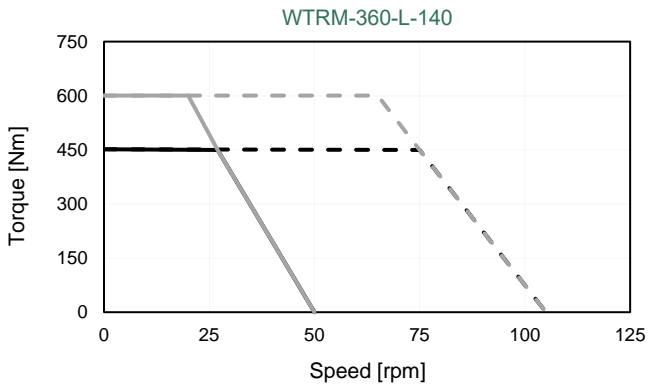
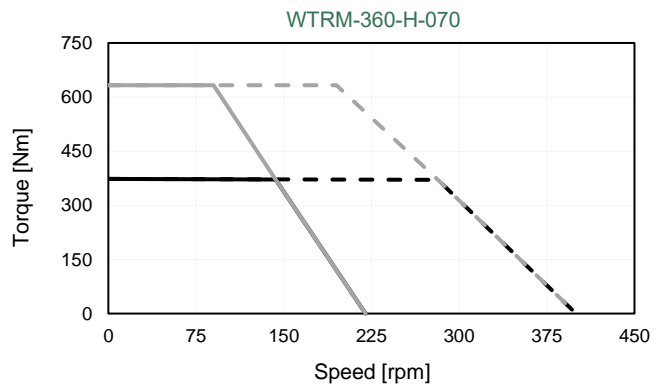
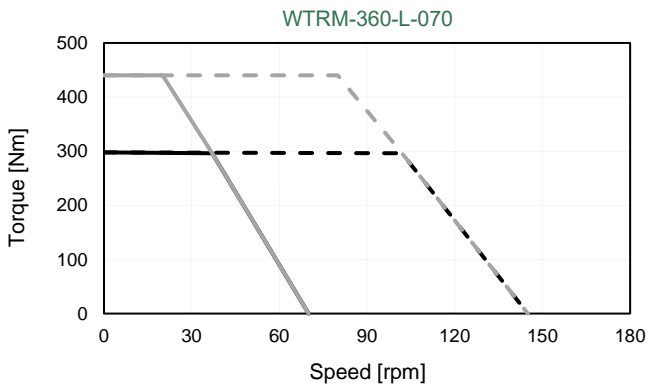
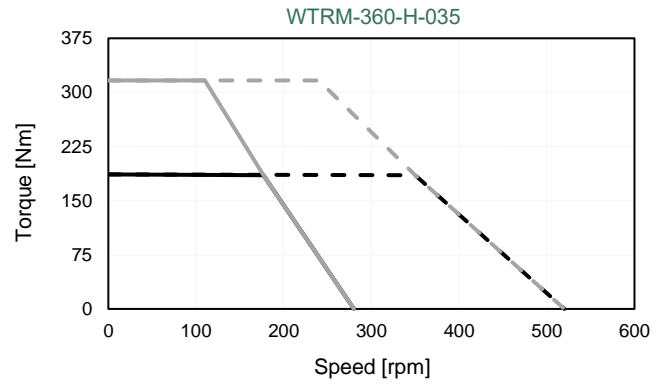
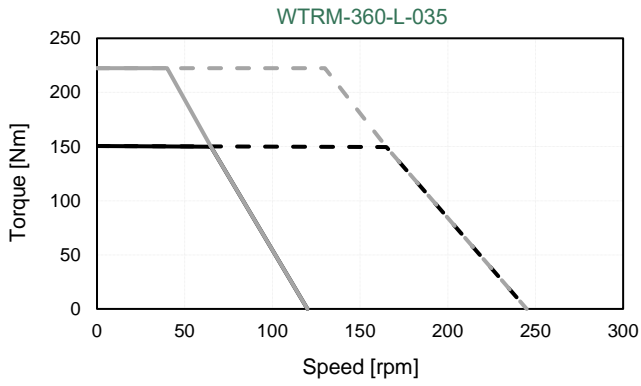
1. All performance and electrical specifications are obtained at 25°C ambient and may change $\pm 10\%$. 2. Maximum coil temperature is 130°C. 3. Higher torque and speed values as well as dimensions on request.

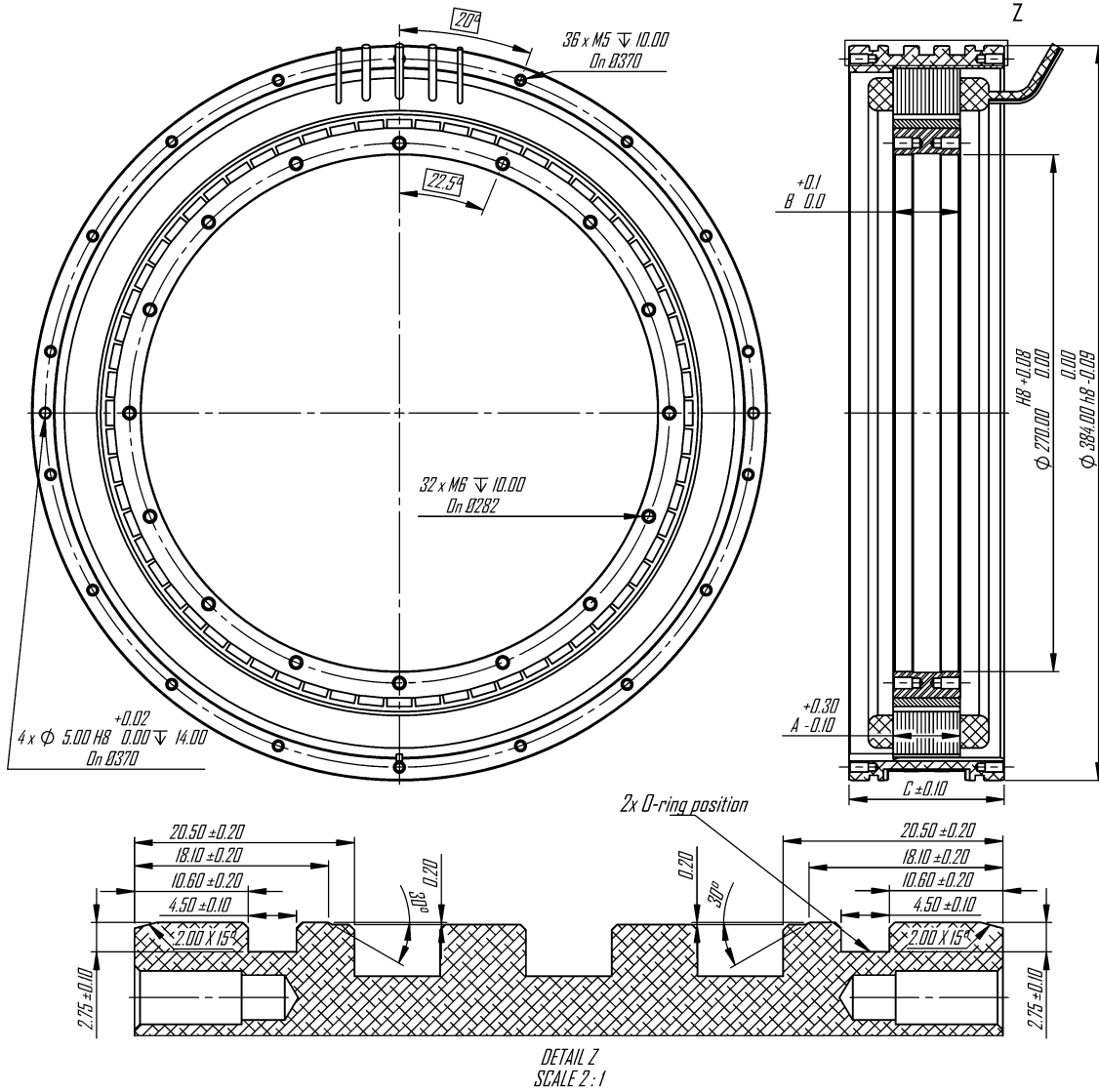
WTRM-360-(L/H)-Torque-Speed Curves

Tr: Rated Torque
Tp: Peak Torque

— @Tr 24V - - - @Tr 48V
— @Tp 24V - - - @Tp 48V

— @Tr 310V - - - @Tr 560V
— @Tp 310V - - - @Tp 560V





Model	A (mm)	B (mm)	C (mm)
WTRM-(L/H)-360-035	35	35.1	81
WTRM-(L/H)-360-070	70	70.2	116
WTRM-(L/H)-360-140	140	140.4	186

All dimensions in mm

Notes:

MOTOR LEADS:
 WTRM-360-L: #5 AWG Teflon® insulated, 500 mm (optional) length, 1-Red, 1-White, 1-Black.
 WTRM-360-H: #9 AWG Teflon® insulated, 500 mm (optional) length, 1-Red, 1-White, 1-Black.

THERMISTOR LEADS:
 #26 AWG Teflon® insulated, 500 mm (optional) length, 2-Brown or Blue.