The 4th –Axis Direct-Drive

Rotary Table : DRT / DRTL Series



Compact Size

High Precision

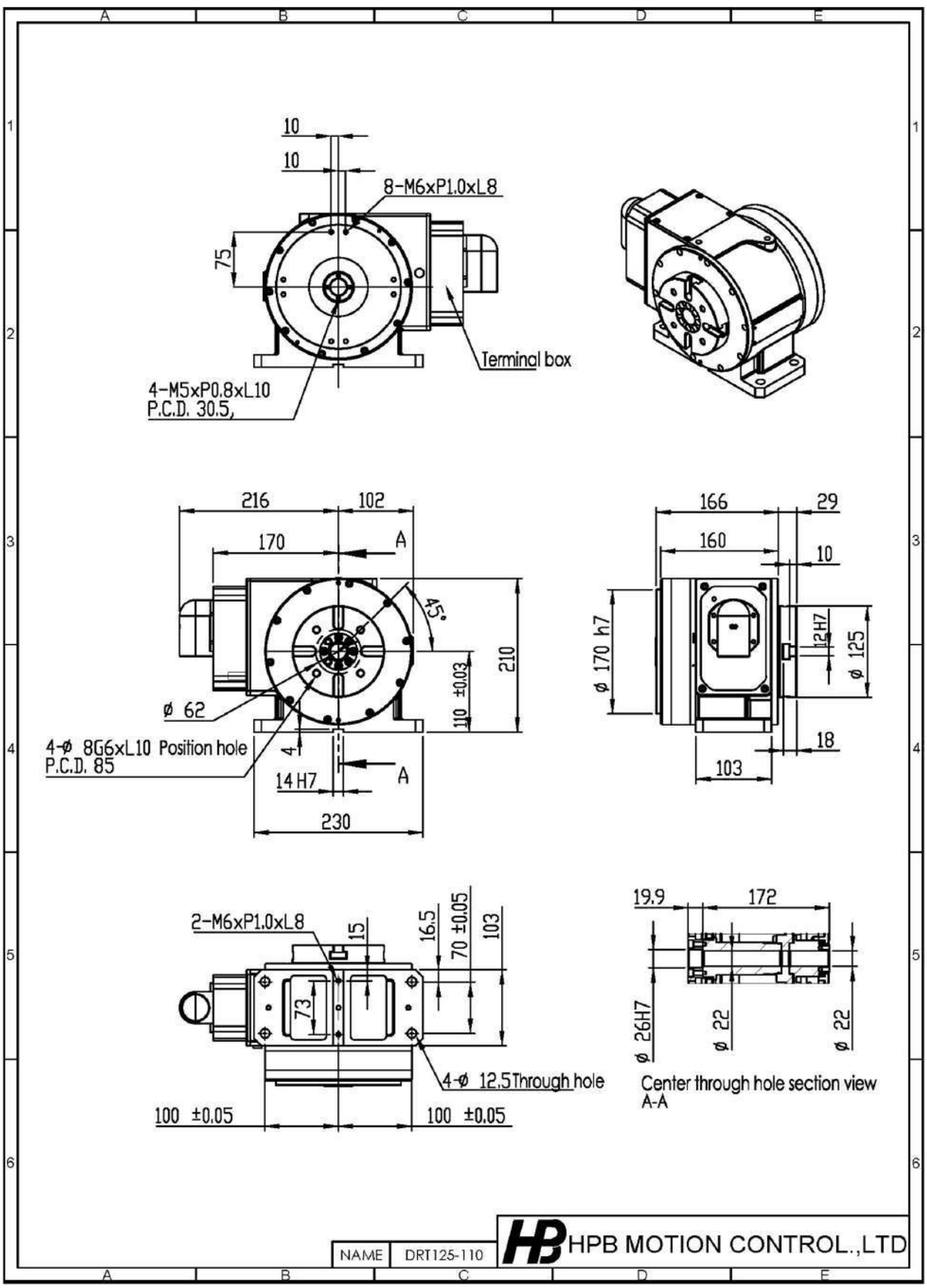
Reliable Quality

Description	Data Position of the order No.										
Direct Drive Rotary Table	DRT	L	125	-	110	N	H	-	E01	-	1
End Plate No.	125										
	175										
	250										
Heavy Duty											
End Plate No.			Dia.125mm								
			Dia.175mm								
			Dia.250mm								
Fix-number											
Center Height		110mm			110						
		135mm			135						
		160mm			160						
Cooling		Enclosed, self-cooled (default)				N					
		Enclosed with Water Jacket, Water cooled				C					
Shaft Extension		Hollow Shaft, Standard					H				
		non-hollow shaft					N				
Fix-number											
Absolute Encoder	SICK SRM50								E01		
	SICK SEK90								E04		
	SICK SEK160								E05		
	RENISHAW-SIEMENS								E06		
	RENISHAW-Mitsubishi								E07		
	RENISHAW-Fanuc								E08		
	RENISHAW-Biss-C								E09		
	HEIDENHAIN-ECA EnDat2.2								E13		
	Customer supply								E00		
Fix-number											
Design version											1-Z

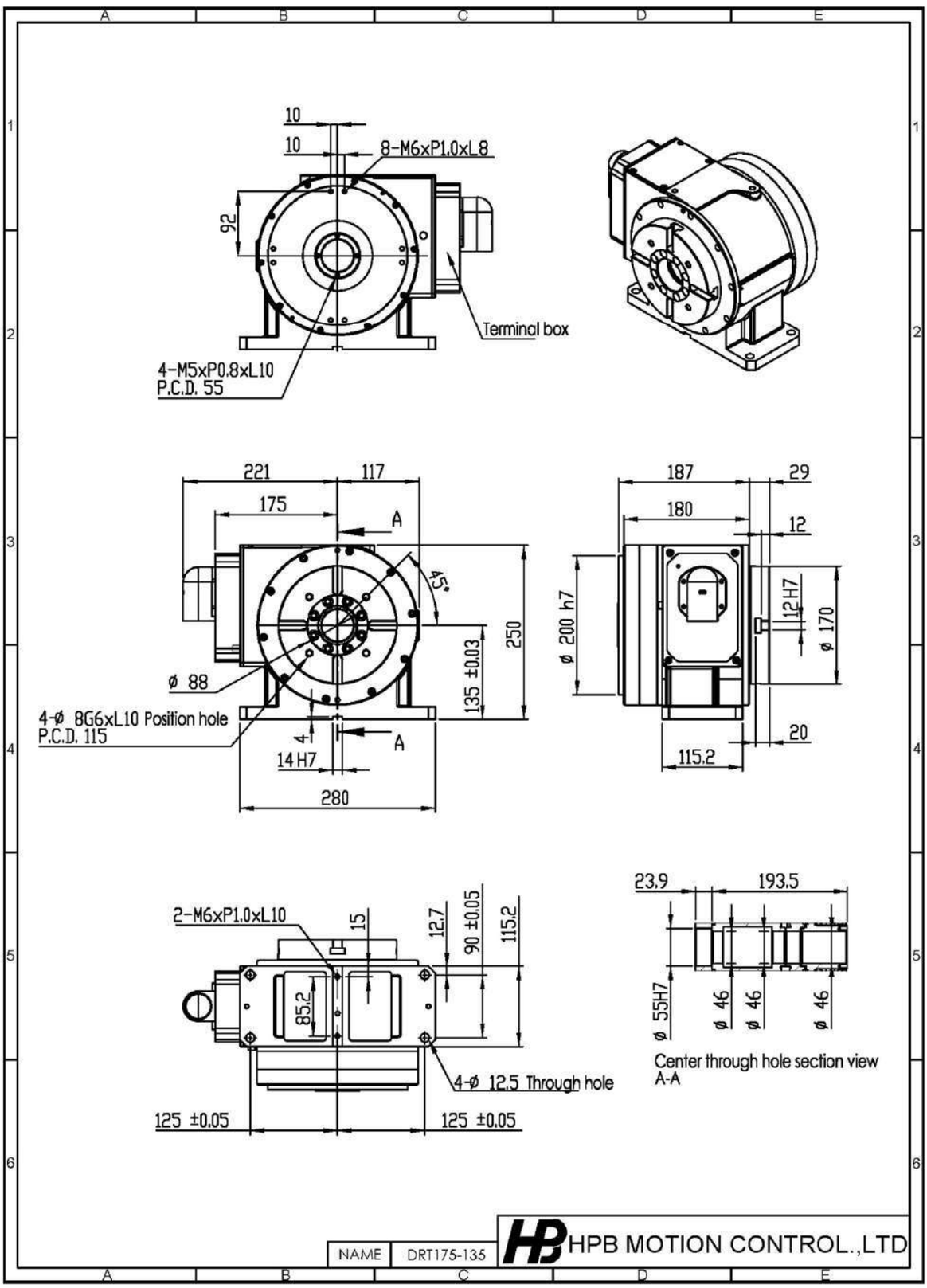
4th-Axis DRT & DRTL (Heavy-Duty) Series

ITEM		UNIT	DRT125-110	DRT175-135	DRT250-160	DRTL250-160
Torque motor DPM [a)]			DPM198-100	DPM230-090	DPM310-120	DPM310-120
Mechanical Specification						
Driving System			Diret-Drive			
Center Height	CH	mm	110	135	160	160
End Plate diameter	PD	mm	ø125	ø170	ø250	ø250
Diameter of center/through hole		mm	ø26H7/ø22	ø55H7/ø46	ø55H7/ø46	ø130H7/ø46
End Plate T-slot width	TW	mm	12H7	12H7	12H7	12H7
Key way Width	KW	mm	14H7	14H7	14H7	18H7
Total Weight (including Torque Motor)	W	Kg	34	48	100	167
Table Inertia	J	kgm2	0.014	0.051	0.11	0.5
Allowable load inertia	Ja	kgm2	0.14	0.5	1	5
Capacity of workpiece mass	Vertical	Kg	20	30	60	100
	w/Tailstock	Kg	50	70	130	250
Clamping Torque	Tc	Nm	150	400	600	800
Allowable load when clamped (FxL)	Ta	Nm	120	320	480	640
Max. radial/axial runout of endplate	Rr/Ra	Um	15 / 15	15 / 15	15 / 15	15 / 15
Cooling method	--	--	self-cooled	self-cooled	self-cooled	self-cooled
Protection	--	--	IP67	IP67	IP67	IP67
Electrical Specification						
Drive Input Voltage	V_D	Vrms	220			
Poles	P		22	44	44	44
Rated Torque	Tr	Nm	20	46	120	120
Max. Torque	Tm	Nm	80	184	480	480
Rated Speed	Vr	rpm	200	150	100	100
Max. Speed	Vm	rpm	400	250	150	150
Rated Power Output	Pr	W	419	723	1257	1257
Rated Current	Ir	Arms	3.8	4.6	8.6	8.6
Max. Current	Im	Arms	18	22	40	40
Back EMF	Ke	vrms/1000rpm	360	660	940	940
Torque Constant	Kt	Nm/Arms	5.3	10	14	14
Least input increment	--	degree	0.001	0.001	0.001	0.001
Absolute accuracy of orientation	P	arc-seconds	1) ±10 ; 2)±20	1) ±10 ; 2)±20	1) ±10 ; 2)±20	1) ±10 ; 2)±20
Absolute accuracy of Repeat	Ps	arc-seconds	±4	±4	±4	±4
Backlash	U	arc-seconds	±4	±4	±4	±4
Encoder Type	1) Renishaw RA26BAA100B10A-30100B Absolute single turn encoder Biss 26 bits					
	2) Sick SEK160 (for RAMH) & SRS50-HAAO-K21 (for RAMN) Absolute sin/cos Encoder - Hyperface Interface					

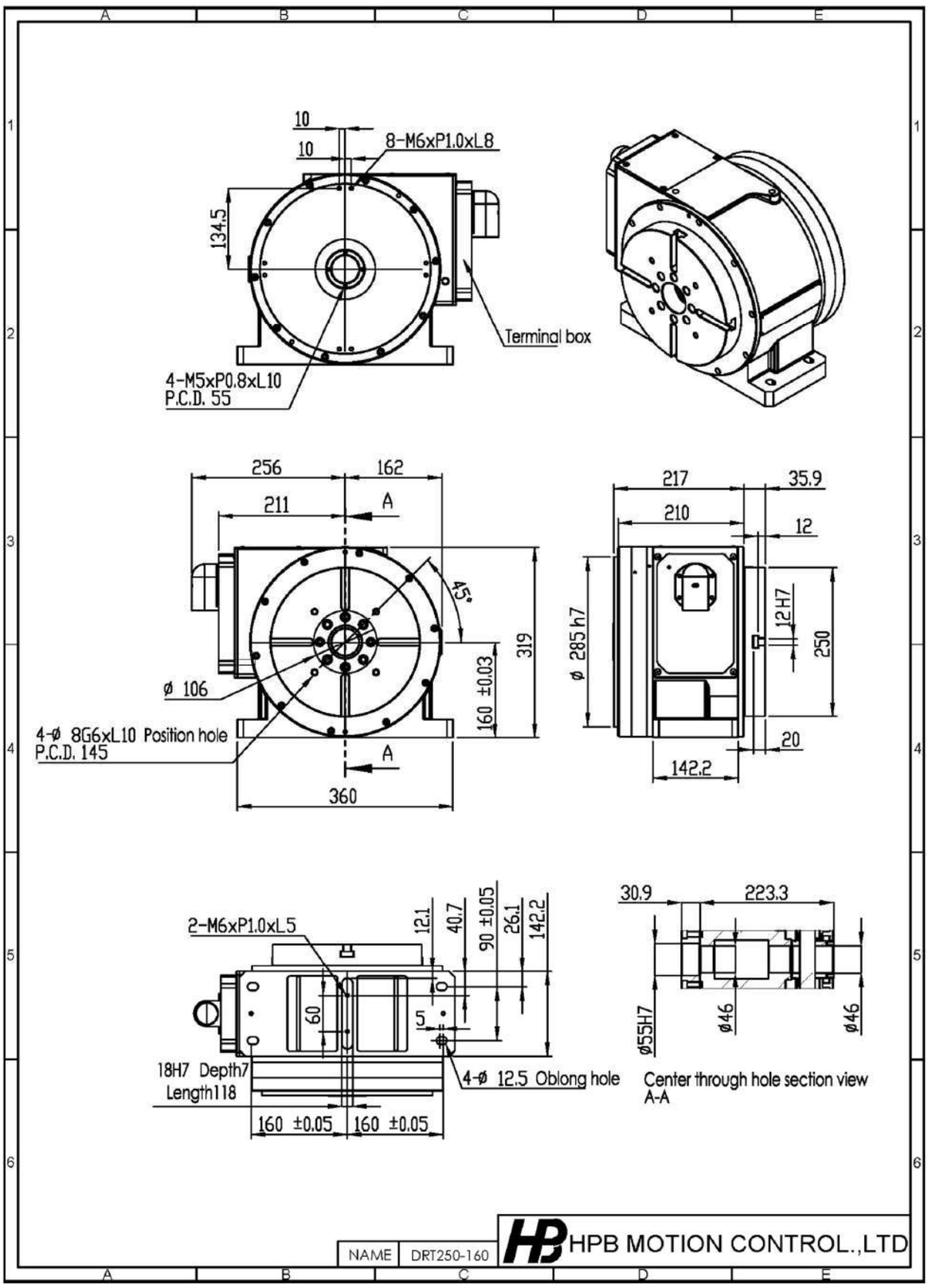
Dimension : DRT125-110



Dimension : DRT175-135



Dimension : DRT250-160



Dimension : DRTL250-160

