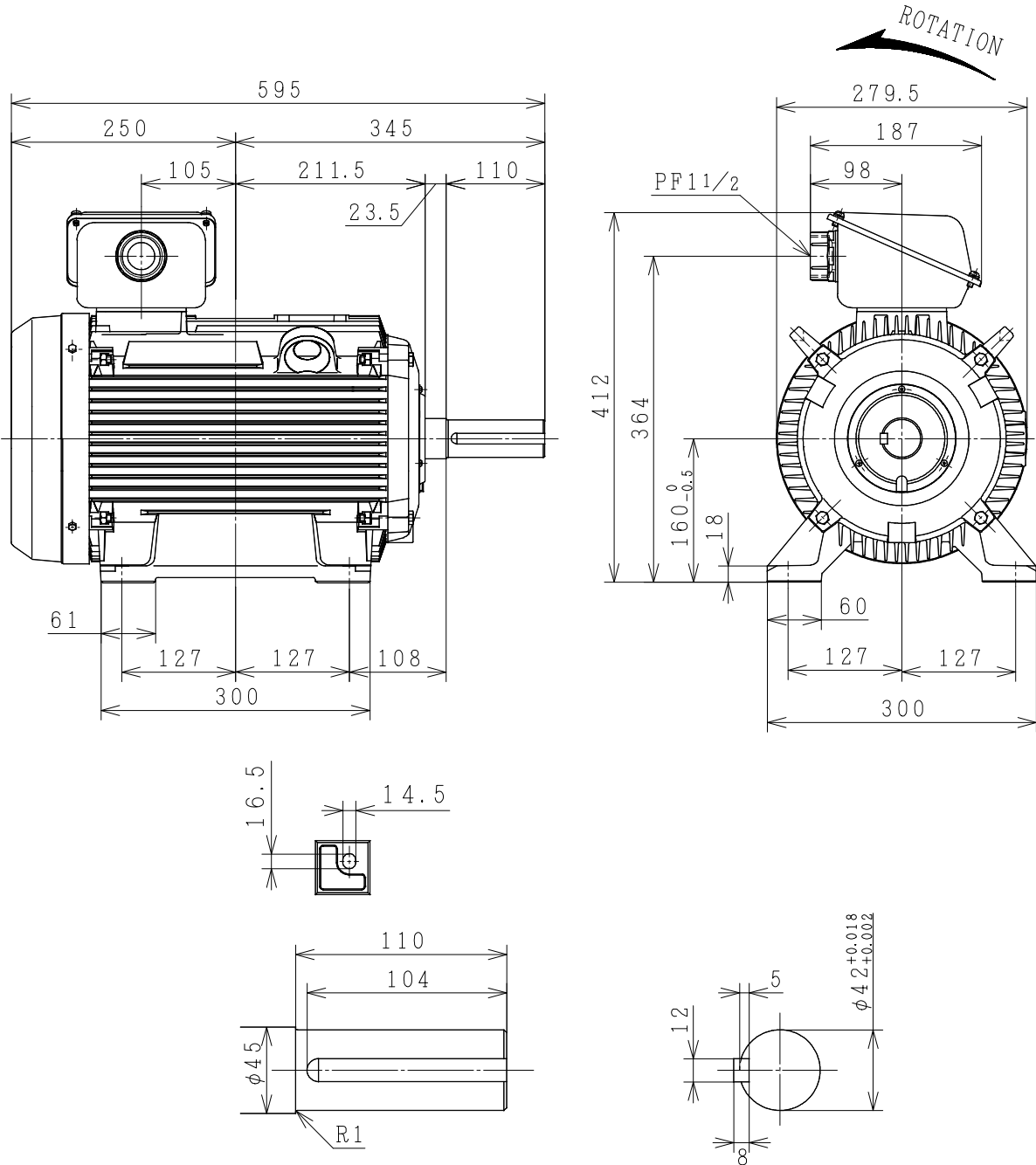


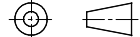
THREE-PHASE INDUCTION MOTOR

OUTPUT	TYPE	FORM	RATING	VOLTAGE (V)	FREQ. (Hz)	SYNC. SPEED (min ⁻¹)	POLES	TH. CLASS	MASS (kg)
25HP	TFO	KK	S1	380/415	50	3000	2	F	85
20HP	TFO	KK	S1	380/415	50	1500	4	F	85
15HP	TFO	KK	S1	380/415	50	1000	6	F	90



PROTECTION : IP55

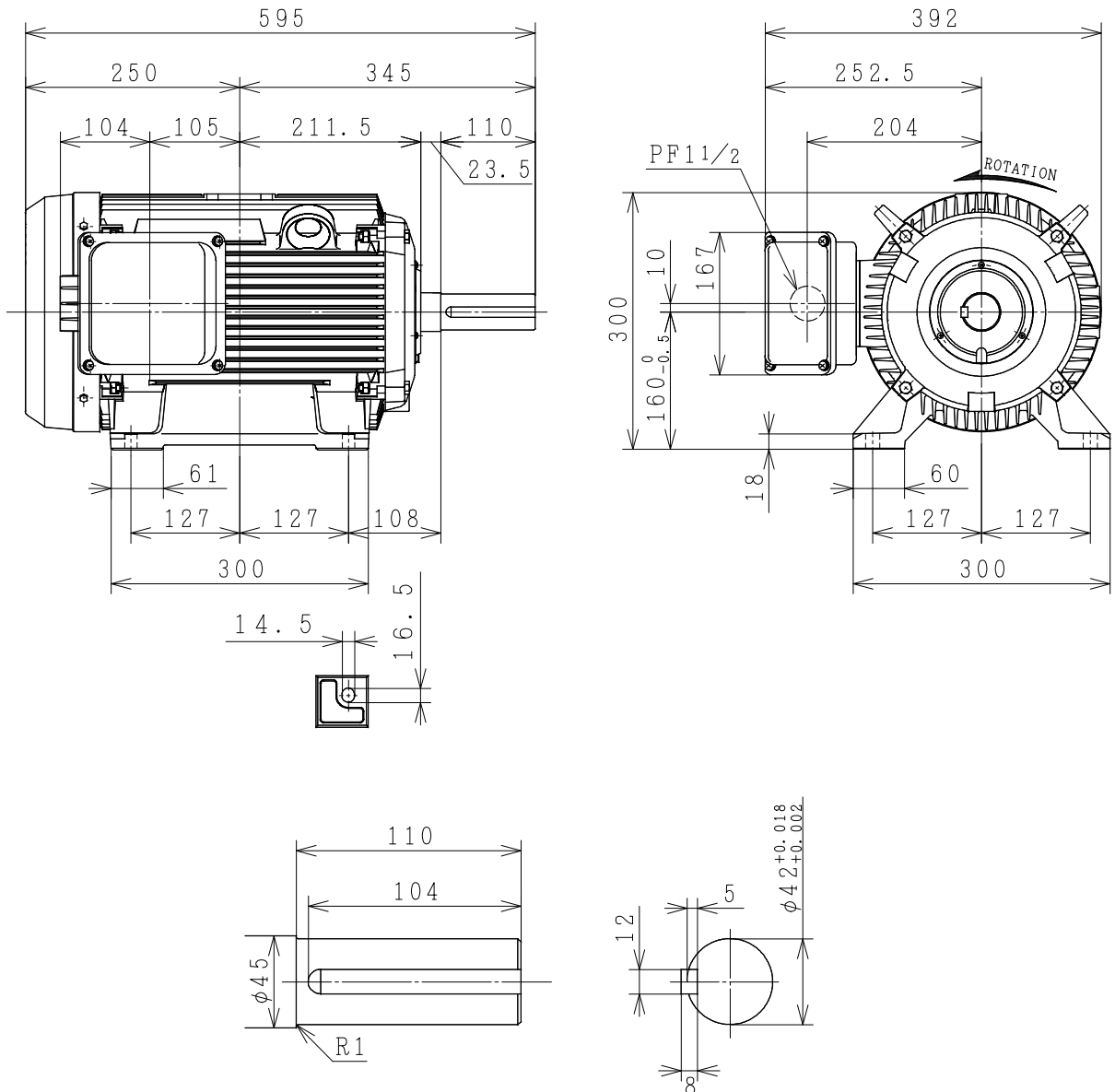
PROJECTION



CUSTOMER	QTY.	ORDER No.	WORK No.	REV.
DIMENSIONS	HITACHI Hitachi Industrial Technology (Thailand), Ltd.		HITT WORKS DWG. No. 4HTD03372	SH.
	FRAME SIZE TFOD-160L (TMHD)			

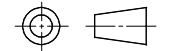
THREE-PHASE INDUCTION MOTOR

OUTPUT	TYPE	FORM	RATING	VOLTS	HERTZ	SYNC. SPEED min^{-1}	POLES	INS. CLASS	WEIGHT (kg.)
25HP	TFO	KK	S1	380/415	50	3000	2	B	85
20HP	TFO	KK	S1	380/415	50	1500	4	B	85
15HP	TFO	KK	S1	380/415	50	1500	6	B	90



PROTECTION: IP55

PROJECTION



CUSTOMER			QTY.	ORDER No.	WORK No.	REV.	
DWN.	P. Tianchai	21-09-12	<div style="font-size: 2em; font-weight: bold;">DIMENSIONS</div>		HITT WORKS DWG. No.	SH.	
CHKD.	W. THAWAT				<div style="font-weight: bold;">HITACHI</div> <small>Hitachi Industrial Technology (Thailand), Ltd.</small>	<div style="font-size: 1.5em; font-weight: bold;">4HTD02386</div>	
APPD.	T. SHIMOZONO						
FRAME SIZE		TFOF-160L (TMLR)					

HITACHI

MANUFACTURER'S TEST REPORT OF INDUCTION MOTOR

MESSRS		ORDER No	
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SPECIFICATION FOR MOTOR

OUT PUT(HP)	20	POLES	4	TYPE-FORM	TFO-KK
FREQUENCY(HZ)	50/50	VOLTAGE(V)	380/415	CURRENT(A)	29.5/29.5
PHASES	3	RATING	S1	INSULATION	F
STANDARD	JEC-2137-2000	SECONDARY VOLTAGE(V)	—	SECONDARY CURRENT(A)	—
COOLING	IC411	PROTECTION	IP55	SPEED(min ⁻¹)	1450/1450

MFG No	FREQUENCY (HZ)	(1)NO-LOAD TEST			(2)LOCKED ROTOR TEST		
		VOLTAGE(V)	CURRENT(A)	INPUT(W)	VOLTAGE(V)	CURRENT(A)	INPUT(W)
	50	380	11.09	498.0	73.2	28.0	1660.0
	50	415	14.92	716.0	73.2	28.0	1660.0

(3)WINDINGS RESISTANCE (BETWEEN LINES) STATOR 115°C 0.72397(Ω)

(4)LOAD CHARACTERISTICS

LOAD(%)	CURRENT(A)	EFFICIENCY(%)	POWER FACTOR(%)	SLIP(%)
25	12.90/16.13	86.4/82.1	51.1/39.3	0.6/0.5
50	17.17/19.23	90.3/88.2	73.5/61.3	1.3/1.1
75	22.84/23.67	90.5/89.5	82.8/73.7	2.0/1.7
100	29.43/29.06	89.4/89.2	86.6/80.3	2.8/2.4
125	36.91/35.21	87.7/88.3	88.0/83.7	3.8/3.1

(5)MAXIMUM OUT PUT(%) STARTING CURRENT(A) STARTING TORQUE(%)

228/268 194.0/212.5 261/313

(6)TEMPERATURE RISE TEST (R)-RESISTANCE METHOD

STATOR WINDINGS(K)	FRAME(K)	ROTOR WINDINGS(K)
75.0/75.0 (R)	45.0/45.0	—

(7)INSULATION RESISTANCE BY 500V MEGGER 100MΩ

(8)WITHSTAND STATOR WINDINGS TO CORE 1900V 1MIN WITHSTOOD
 VOLTAGE TEST ROTOR WINDINGS TO CORE — V 1MIN WITHSTOOD

(9)CONSTRUCTION, DIMENSION, PAINTING, OTHER PARTS SATISFACTORY

HITACHI INDUSTRIAL TECHNOLOGY (THAILAND) LTD.	CHECKED BY	T.SHIMOZONO
	DATE	09-JUNE-2015

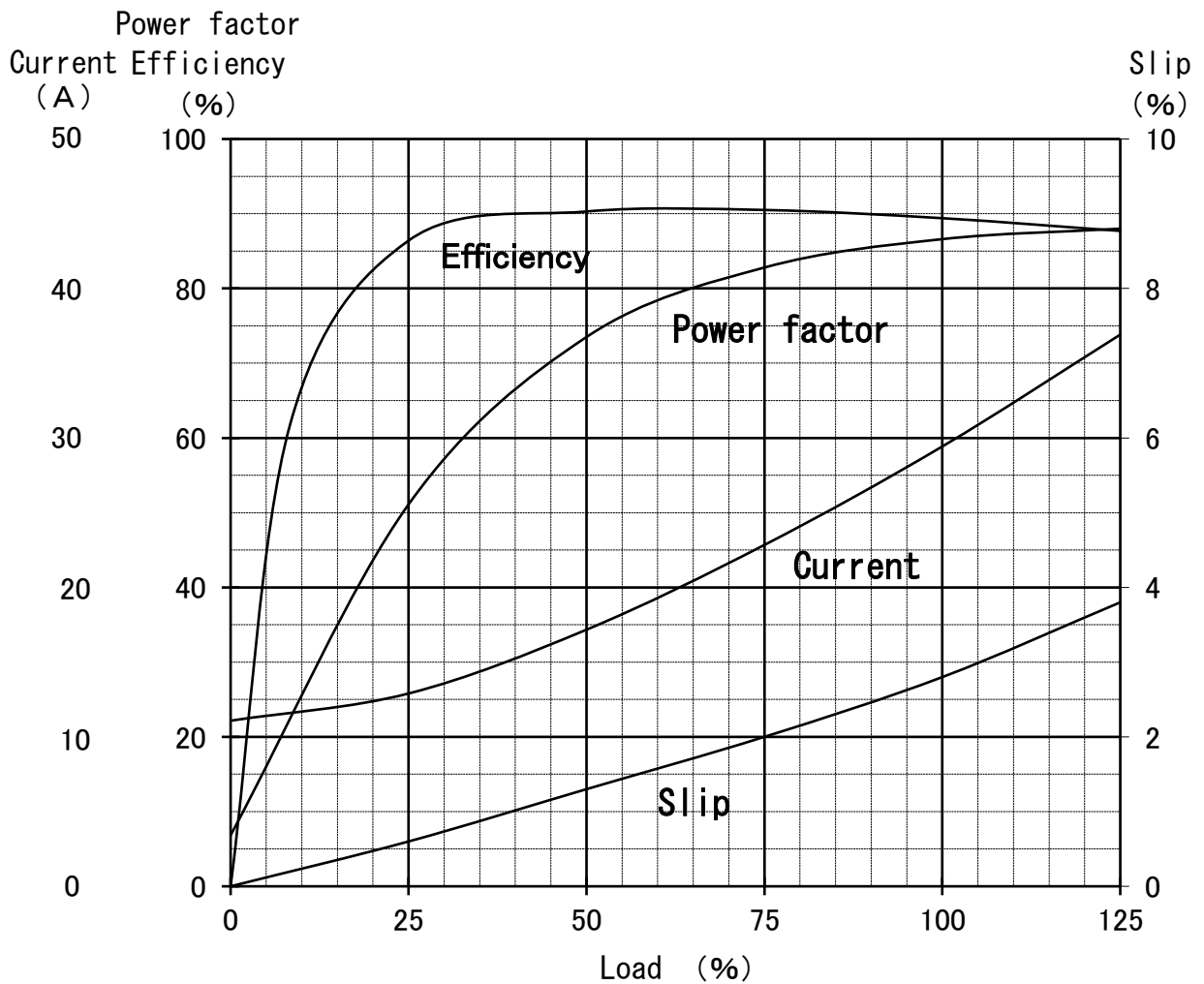
REP.No_RP20313

Three Phase Induction Motor Characteristic Curve

Hitachi Industrial Technology(Thailand),Ltd

Power (HP)	20
Pole	4
Type-Form	TFO-KK, VTFO-KK
Voltage (V)	380
Frequency (Hz)	50
Protection	IP44, IP55

Load (%)	0	25	50	75	100	125
Current (A)	11.08	12.90	17.17	22.84	29.43	36.91
Efficiency (%)	0	86.4	90.3	90.5	89.4	87.7
Power factor (%)	6.8	51.1	73.5	82.8	86.6	88.0
Slip (%)	0	0.6	1.3	2.0	2.8	3.8



Speed-Torque, Current Curve

20HP (V) TF0-KK 4P
380/415V 50Hz
IP44/IP55

