

HITACHI

MANUFACTURER'S TEST REPORT OF INDUCTION MOTOR

MESSRS		ORDER No	
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SPECIFICATION FOR MOTOR

OUT PUT(HP)	50	POLES	4	TYPE-FORM	VTFO-KK
FREQUENCY(HZ)	50/50	VOLTAGE(V)	380/415	CURRENT(A)	73/73
PHASES	3	RATING	S1	INSULATION	F
STANDARD	JEC-2137-2000	SECONDARY VOLTAGE(V)	—	SECONDARY CURRENT(A)	—
COOLING	IC411	PROTECTION	IP55	SPEED(min ⁻¹)	1460/1460

MFG No	FREQUENCY (HZ)	NO-LOAD TEST			LOCKED ROTOR TEST		
		VOLTAGE(V)	CURRENT(A)	INPUT(W)	VOLTAGE(V)	CURRENT(A)	INPUT(W)
	50	380	24.10	1360.0	85.0	70.0	3850.0
	50	415	34.97	1760.0	85.0	70.0	3850.0

(3) WINDINGS RESISTANCE (BETWEEN LINES) STATOR 115°C 0.05308(Ω)

(4) LOAD CHARACTERISTICS

LOAD(%)	CURRENT(A)	EFFICIENCY(%)	POWERFACTOR(%)	SLIP(%)
25	29.53/38.46	85.7/82.3	55.5/40.6	0.4/0.3
50	41.10/46.85	90.6/88.8	75.5/61.7	0.7/0.7
75	55.83/58.53	91.4/90.5	82.6/72.7	1.2/1.0
100	72.86/72.57	91.0/90.6	84.8/78.1	1.6/1.4
125	92.51/88.75	89.8/90.1	84.5/80.3	2.2/1.8

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

198/230 438.0/487.5 230/285

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

STATOR WINDINGS(K)	FRAME(K)	ROTOR WINDINGS(K)
79.0/79.0 (R)	48.5/48.5	-

(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

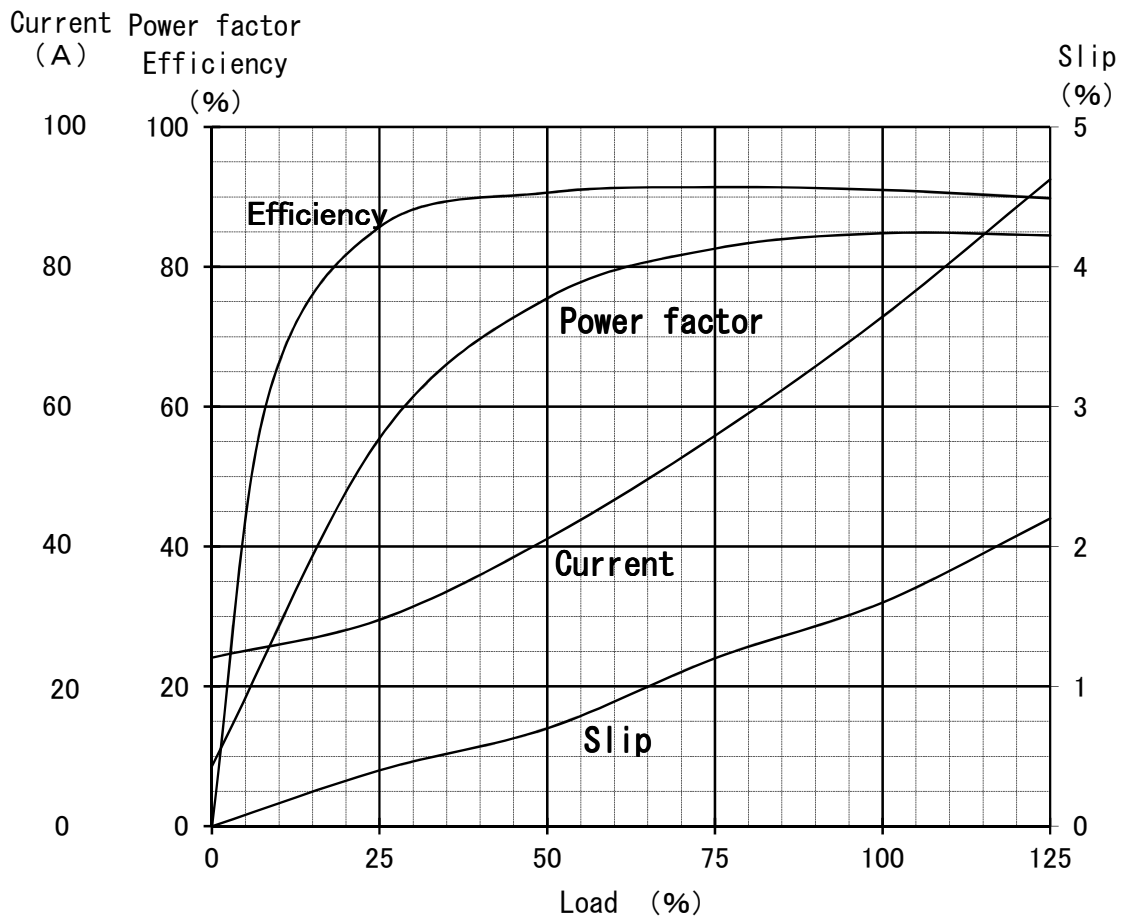
HITACHI INDUSTRIAL TECHNOLOGY (THAILAND) LTD.	CHECKED BY	T.SHIMOZONO
	DATE	27-MAY.-2015

Three Phase Induction Motor Characteristic Curve

Hitachi Industrial Technology(Thailand),Ltd

Power (HP) 50
 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)	24.10	29.53	41.10	55.83	72.86	92.51
Efficiency(%)	0	85.7	90.6	91.4	91.0	89.8
Power factor(%)	8.6	55.5	75.5	82.6	84.8	84.5
Slip (%)	0	0.4	0.7	1.2	1.6	2.2



Speed-Torque, Current Curve

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

