

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 Tru-Metric IE3 Three-Phase		Product code : 15058461			
Frame	: 90S	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: B35L(E)		
Duty cycle	: S1	Rotation ¹	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight ²	: 21.5 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0020 kgm ²		
Design	: N				
Output [HP]	2	2	2		
Poles	2	2	2		
Frequency [Hz]	50	50	60		
Rated voltage [V]	380	415	230/460		
Rated current [A]	3.22	3.18	5.50/2.75		
L. R. Amperes [A]	24.5	25.4	51.7/25.9		
LRC [A]	7.6	8.0	9.4		
No load current [A]	1.43	1.80	3.00/1.50		
Rated speed [RPM]	2870	2895	3505		
Slip [%]	4.33	3.50	2.64		
Rated torque [kgfm]	0.506	0.501	0.414		
Locked rotor torque [%]	220	260	290		
Breakdown torque [%]	250	300	360		
Service factor	1.25	1.25	1.25		
Temperature rise	80 K	80 K	80 K		
Locked rotor time	27s (cold) 15s (hot)	27s (cold) 15s (hot)	28s (cold) 16s (hot)		
Noise level ²	62.0 dB(A)	62.0 dB(A)	68.0 dB(A)		
Efficiency (%)	25%				
	50%	82.0	81.5	81.0	
	75%	83.5	83.5	84.0	
	100%	84.2	84.2	85.5	
Power Factor	25%				
	50%	0.67	0.57	0.61	
	75%	0.78	0.70	0.73	
	100%	0.84	0.78	0.80	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	17.1	17.1	15.5	
	P2 (0,5;1,0)	13.1	13.1	11.9	
	P3 (0,25;1,0)	13.4	13.4	12.1	
	P4 (0,9;0,5)	10.4	10.4	9.4	
	P5 (0,5;0,5)	6.4	6.4	5.8	
	P6 (0,5;0,25)	5.0	5.0	4.5	
	P7 (0,25;0,25)	3.4	3.4	3.1	
Bearing type	: Drive end 6205 ZZ	Non drive end 6204 ZZ	Foundation loads		
Sealing	: V'Ring	V'Ring	Max. traction	: 31 kgf	
Lubrication interval	: -	-	Max. compression	: 53 kgf	
Lubricant amount	: -	-			
Lubricant type	: Mobil Polyrex EM				
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/01/2024			1 / 5	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/01/2024		2 / 5	

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

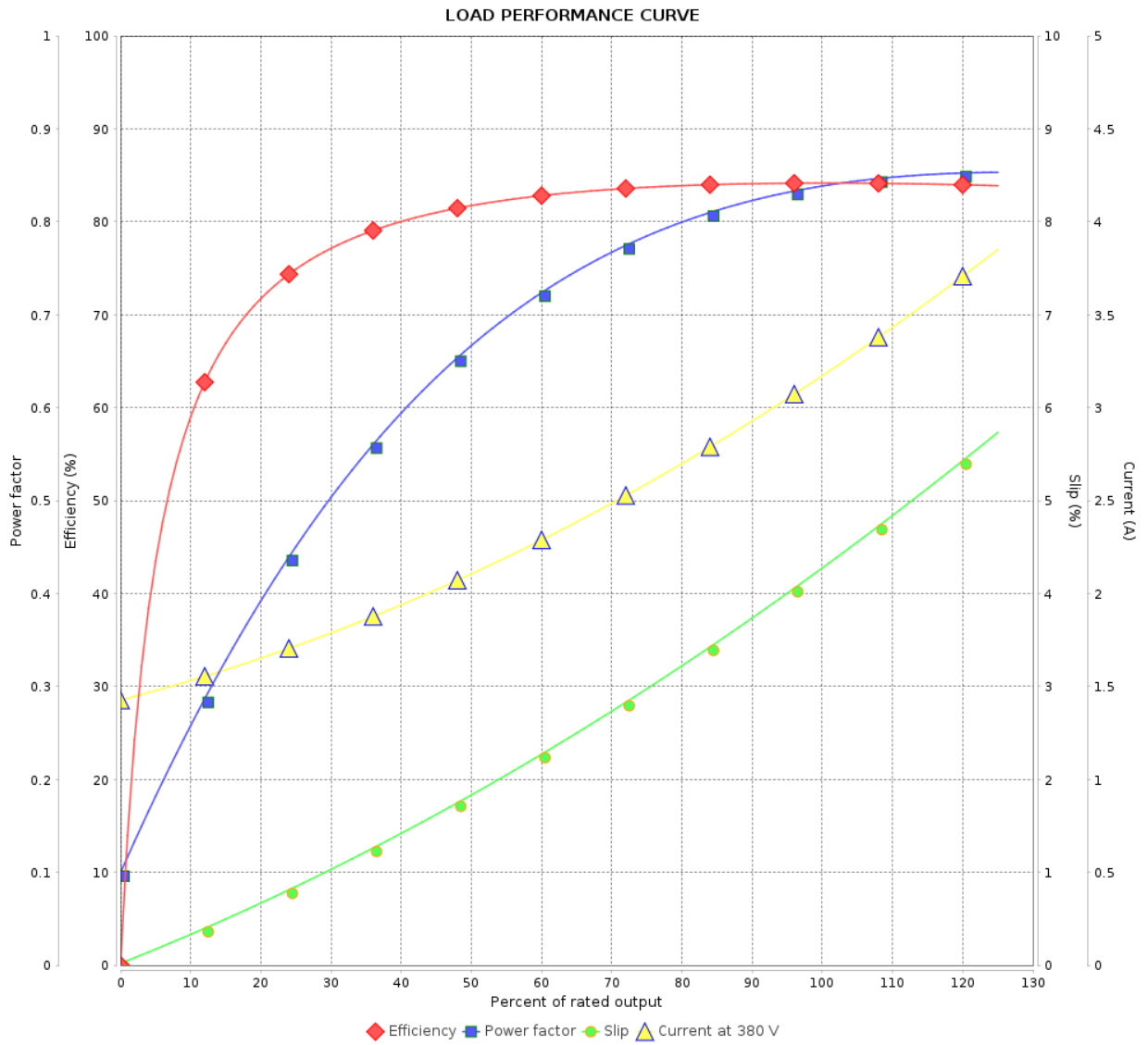


Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

15058461



Performance : 380 V 50 Hz 2P

Rated current : 3.22 A
 LRC : 7.6
 Rated torque : 0.506 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0020 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 5	Revision
Checked by				
Date	14/01/2024			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

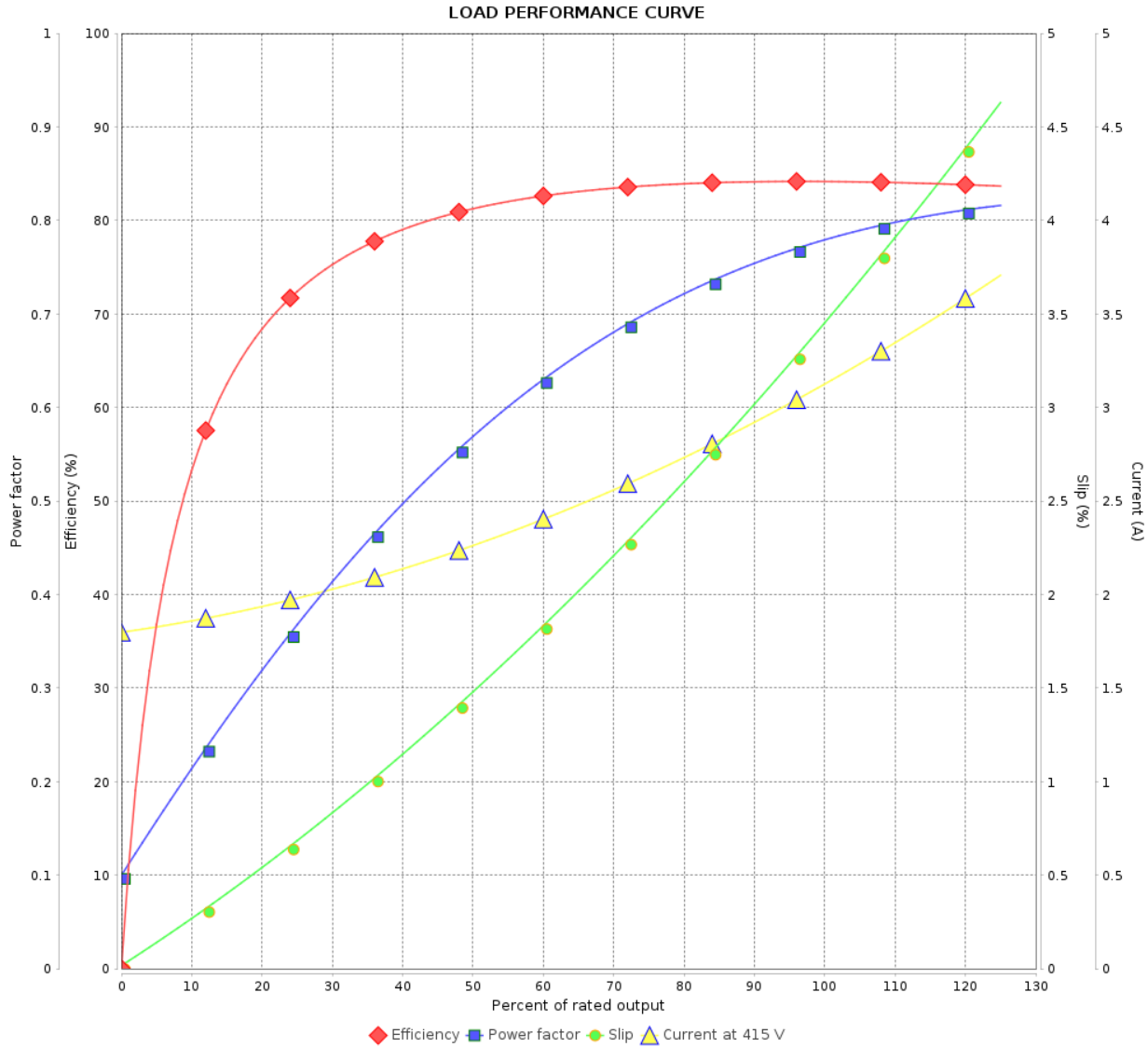


Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

15058461



Performance : 415 V 50 Hz 2P

Rated current : 3.18 A
 LRC : 8.0
 Rated torque : 0.501 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 300 %
 Rated speed : 2895 rpm

Moment of inertia (J) : 0.0020 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 5	Revision
Checked by				
Date	14/01/2024			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

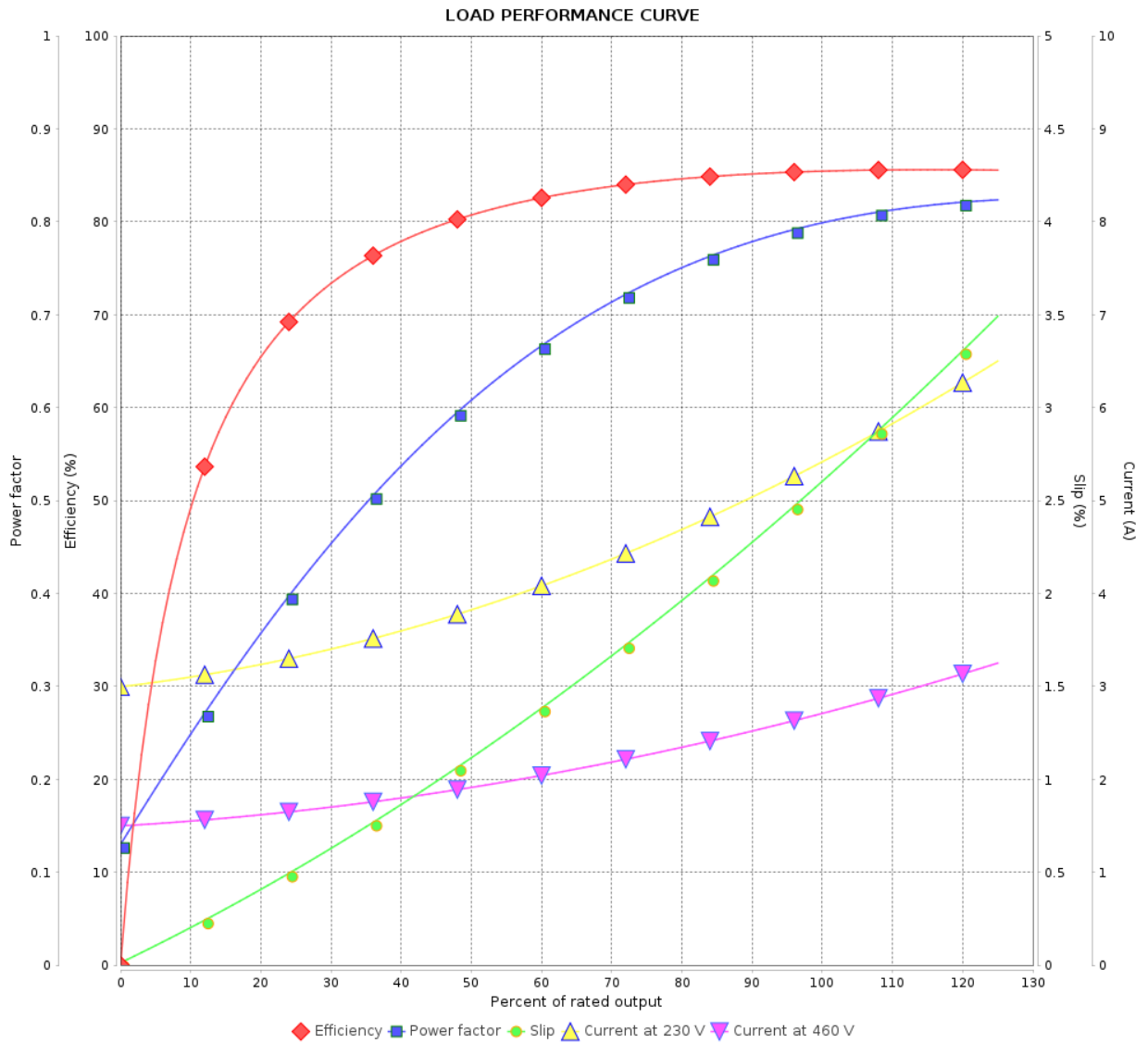


Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

15058461



Performance : 230/460 V 60 Hz 2P

Rated current : 5.50/2.75 A
 LRC : 9.4
 Rated torque : 0.414 kgfm
 Locked rotor torque : 290 %
 Breakdown torque : 360 %
 Rated speed : 3505 rpm

Moment of inertia (J) : 0.0020 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				