Reference Information

Chapter 5

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Using IronHorse® Motors with AC Drives

IronHorse® general purpose motors can be controlled by across-the-line starters such as contactors and manual motor starters. Under certain circumstances, it can be more desirable to control a three-phase IronHorse motor with an AC drive.

Single phase AC motors cannot be controlled by typical AC drives.

The advantages of using an AC drive include:

- *Lower inrush current at motor startup.*
- *Ability to change motor speed at any time.*
- *Greater efficiency in some applications. Fan and Pump applications can use an AC drive to provide motor flow control by varying the motor speed.*
- *Solid state power delivery meaning minimum maintenance.*

There are a few considerations to take into account when an AC drive is chosen for motor control. Fan cooled motors are designed to provide sufficient insulation cooling when the motor is running at the rated speed. The cooling ability of the fan is reduced when motors run at lower speeds. Therefore, there are limitations on how slowly general purpose motors can be continuously run without prematurely causing insulation failure.

- *Constant torque (CT) applications:*
  MTCP and MTRP motors 4:1 (down to 1/4 rated speed); MTC, MTR, & MTSS motors 2:1 (1/2 rated speed); MTCP2, MTDP motors 10:1 (1/10 rated speed):
  The CT minimum continuous speed for an IronHorse general purpose motor is one quarter or one half of its rated speed, as shown in the motor Performance Data tables.
  (Constant torque loads require the same amount of torque from the motor regardless of speed; e.g., conveyors, cranes, machine tools.)
- *Variable Torque (VT) applications:*
  MTCP and MTRP motors 10:1 (1/10 rated speed); MTC, MTR, & MTSS motors 5:1 (1/5 rated speed), MTCP2, MTDP motors 20:1 (1/20 rated speed):
  The VT minimum continuous speed for an IronHorse general purpose motor is one tenth or one fifth of its rated speed, as shown in the motor Performance Data tables.
  (Variable torque loads require less torque at lower speeds, resulting in less heat generated by the motor; e.g., fans, centrifugal pumps.)

The insulation of IronHorse motors in both of the above applications can withstand voltage stress per NEMA Part 30 having a value of:

- *Base Voltage Rating ≤ 600V*
- V_{pk} = *1kV*
- *Rise Time = 2μs*

AutomationDirect offers a line of AC Drives that are suitable for operating IronHorse motors per the above specs and NEMA part 30.

Voltage Spike Considerations for AC Drive Control

All AC drives can cause voltage spikes between the drive and the motor. Long cable lengths can increase these spikes. Therefore, there are maximum cable lengths that can be run between the drive and the motor. Line (load) reactors can also be installed near the drive output to reduce the voltage spikes.

- *230V & 460V without reactor: 25ft maximum cable length between the drive and motor.*
- *230V & 460V with reactor: Motor dependent - 100ft maximum cable length between the drive and motor.*

To avoid overheating, the AC Drive carrier frequency must be set at or below 6kHz.

Double Punched Motors

Several IronHorse® motor models have mounting feet that are double punched so that additional motors can be mounted using the same dimensions of different size frame motors. This can be helpful when replacing a motor with a different frame size. See Chapter 2: Mounting and Initial Startup for complete motor dimensions.

Motor Mounting Feet		
Frame Size *	***Double Punched***	***Punched for Additional Frame Size***
56 **	Yes	56H
143T	No	–
145T	Yes	143T
182T ***	Yes	184T
184T	Yes	182T
213T	No	–
215T	Yes	213T
254T	No	–
256T	Yes	254T
284T	No	–
286T	Yes	284T
324T	No	–
326T	Yes	324T
364T	No	–
365T	Yes	364T
405T	Yes	404T
444T	No	–
445T	Yes	444T
445/7T	Yes	445T
449T	No	–

** TC-frame motors have the same mounting foot punching as the comparable T-frame motors.*
*** MTSS-xxx-xxxxR round-body motors do not have mounting feet.*
**** MTF-002-1C18-182 only*

Radial Overhung Load

The table below lists the maximum overhung radial load for MTCP, MTCP2, and MTC cast-iron motors. Values listed are in pounds (lbs) at the center of the N-W dimension.

Shaft Loading for AC Induction Horizontal Motors with Ball Bearings				
Frame Size	***Synchronous Speed***			
	3600	***1800***	***1200***	***900***
143T	106	154	179	192
145T	109	154	176	196
182T	180	227	260	287
184T	180	227	260	289
213T	230	300	350	380
215T	230	300	350	380
254T	470	593	703	774
256T	470	589	705	776
284T	570	735	838	929
286T	570	735	838	929
324T	660	860	990	1100
326T	660	850	980	1090
364T	820	1080	1240	1390
365T	820	1080	1240	1370
404T	-	1270	1450	1600
405T	-	1290	1480	1630
444T	-	1560	1760	1970
445T	-	1520	1760	1970
447T	-	1450	1660	1880
449T	-	1490	1660	1880

Notes:

- *All belt loads are considered to act in vertically downward direction.*
- *Overhung loads include belt tension and weight of sheave.*
- *For load at end of the shaft, subtract 15%.*
- *Radial overhung load limits based on bearing L-10 life of 26,280 hours.*
- *Overhung load limits do not include any effect of unbalanced magnetic pull.*
- *In applications involving over hung load, drive end, bearing life, may be increased by replacing ball bearings with equivalent roller bearings. Consult your EASA authorized motor shop for details.*

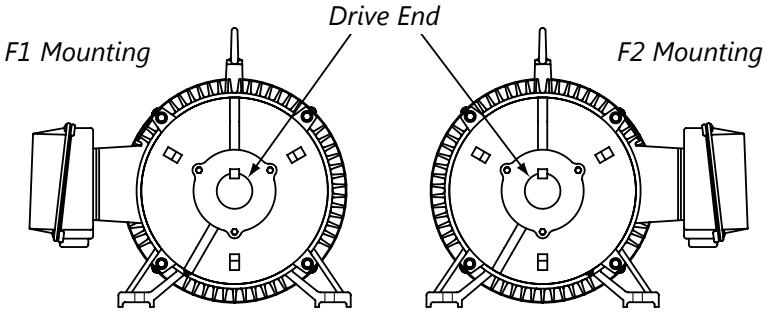
F1 and F2 Mounting

F1 and F2 mounting refers to the location of the junction box on an AC motor. Several models of IronHorse® motors can be converted from F1 to F2 mounting.

F1 to F2 Mounting Convertibility	
Frame Size *	***Ability to be Converted***
56	No (F1 only)
143T	MTC Motors: Yes (F1, convertible to F2) MTCP(2) Motors: Yes (F1, convertible to F2) MTF Motors: No (F1 only) MTF2 Motors: No (F1 only) MTDP Motors: No (F1 only)
145T	
182T	
184T**	
213T	
215T	
254T	
256T	
284T	MTC Motors: No (F1 only) MTCP(2) Motors: Yes (F1, convertible to F2) MTDP Motors: No (F1 only)
286T	
324T	
326T	
364T	MTC Motors: No (F1 only) MTCP(2) Motors: No (F1 only)
365T	
405T	
444T	MTC Motors: Yes (F1, convertible to F2) MTCP(2) Motors: Yes (F1, convertible to F2)
445T	
445/7T	
449T	No (F1 only)

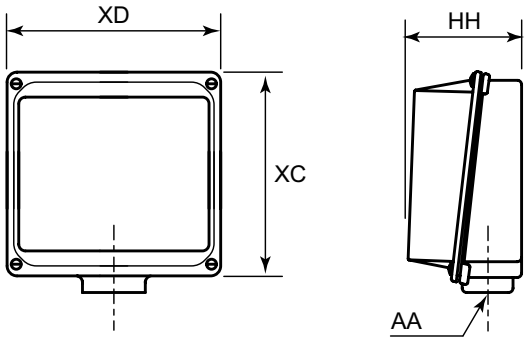
** TC-frame motors have the same convertibility as the comparable T-frame motors.*

*** The MTCP2 184T frame motor is F1 only.*



To minimize the potential of damage to any internal component, use caution when pulling the rotor from the frame when converting an IronHorse® motor from F1 to F2 mounting. Authorized EASA service centers are equipped with the necessary equipment to quickly and inexpensively convert motor mounting. Visit the EASA website at www.easa.com to find the nearest authorized service center. Conversion from F1 to F2 mounting must be performed by an EASA motor shop in order to maintain the motor warranty.

Junction Box Dimensions



Junction Box Dimensions (in)										
Frame Size *	***XD (Width)***			***XC (Height)***			***HH (Depth)***			***AA (Conduit Hole) (NPT)***
	MTF2	***MTR2 MTRP***	***MTCP2***	***MTF2***	***MTR2 MTRP***	***MTCP2***	***MTF2***	***MTR2 MTRP***	***MTCP2***	
56	n/a	3.2	n/a	n/a	3.7	n/a	n/a	1.6	n/a	1/2
143T		4.1	4.1		4.5	4.5		2.3	2.4	3/4
145T										
182T	7.8	4.6	4.6	7.8	5.0	5.0	2.7	2.6	2.8	1
184T										
213T	n/a			n/a			n/a			
215T										
254T		6.3	6.3		7.2	7.3		3.3	3.7	1-1/2
256T										
284T										
286T										
324T		9	9.0		10.6	10.6		5.3	5.7	2
326T										
364T										3
365T										
405T		9.8	9.8		11.7	11.8		7.1	7.2	
444T		11.3	11.3			11.8			7.2	3 (2 openings)
445T										
445/7T										
449T			11.3			12.4			7.3	

** TC-frame motors have the same junction boxes as the comparable T-frame motors.*

Minimum Sheave Diameters

The table below illustrates the minimum practical V-belt sheave diameter that can be used with each IronHorse® motor frame size.

Minimum Sheave Diameters		
Frame Size (1)	***V-Belt Sheave (2)***	
	Conventional A, B, C, D and E (3)	***Narrow 3V, 5V and 8V (4)***
	Minimum Pitch Diameter (in)	***Minimum Outside Diameter (in)***
143T	2.2	2.2
145T	2.4	2.4
182T	2.4	2.4
184T	3.0	3.0
213T	3.0	3.0
215T	3.8	3.8
254T	4.4	4.4
256T	4.6	4.4
284T	5.0	4.4
286T	5.4	5.2
324T	6.0	6.0
326T	6.8	6.8
364T	7.4	7.4
365T	9.0	8.6
405T	10.0	8.6
444T	11.0	9.5
445T	–	10.5
449T	–	13.2

1) TC-frame motors have the same minimum sheave diameters as the comparable T-frame motors.
2) Sheave dimensions are based on the following:
a) Motor nameplate horsepower and speed.
b) Belt service factor of 1.6 with belts tightened to the belt manufacturers recommendations.
c) Speed reduction of 5:1.
d) Mounting of sheave on motor according to sheave manufacturers instructions.
e) Center-to-center distance between sheaves approximately equal to the diameter of the larger sheave.
f) Calculations covered by the standards listed in notes 3 & 4 below.
3) As covered by IP-20; Specifications for Drives Using Classical V-Belts and Sheaves. Go to www.mpta.org and www.rma.org for details.
4) As covered by IP-22; Specifications for Drives Using Narrow V-Belts and Sheaves. Go to www.mpta.org and www.rma.org for details.

Decibel Levels

The decibel (sound) level of an IronHorse® motor should be measured after initial startup, after 30 days, and after six months of use. Decibel levels should remain fairly consistent and can be an indication of misalignment and premature bearing wear. If the measured decibel level for your IronHorse model exceeds the value listed below by more than 10%, contact AutomationDirect or a local motor service technician found at www.easa.com.

Average T-Frame Decibel Levels

Frame Size *	HP	Noise Level: Lw dB(A) @ 1m						
		MTF	MTCP2			MTDP		MTF2
			1200 RPM	1800 RPM	3600 RPM	1800	3600	1800
143T	1	–	–	60	–	50	–	–
	1-1/2			–	62	–		
145T	1	–	58		–			
	1-1/2		–	62		50		
	2			62	62	51		
	3			–	–	–	56	
182T	1-1/2	–	62	–	–	–	–	–
	2	76.0	–					54
	3			63	64	52		–
	5	–		–	–	–	67	
184T	2	–	62	–	–	–	–	–
	3		–					56
	5	76.0		63	64	53		58
	7.5			–	–	–	67	–
213T	3	–	64	–	–	–	–	56
	7-1/2		–	63	65	55	–	–
215T	5		64	–	–	–	–	–
	7-1/2		–					62
	10			64	67	56		65
254T	7-1/2		66	–	–			–
	15		–	67	70	60		
256T	10		68	–	–			
	20		–	68	72	63		
284T	15		70	–	–			
	25		–	70		66		
286T	20		70	–	–	–		
	30		–	70		67		
324T	40			71		69		
326T	50			72		70		
364T	60			73	–	–		
365T	75			74				
405T	100			74				
444T	125			76				
445T	150			77				
445/7T	200			78				
449T	250			93				
	300			93				

** TC-frame motors have the same sound ratings as the comparable T-frame motors.*

(CONTINUED ON NEXT PAGE)

Average 56C Frame Decibel Levels									
MTR2						***MTRP***			
Noise Level: Lw dB(A) @ 1m						***Noise Level: Lw dB(A) @ 1m***			
Frame Size	***HP***	***1800 RPM***		***3600 RPM***		***Frame Size***	***HP***	***1800 RPM***	***3600 RPM***
		1Ø	***3Ø***	***1Ø***	***3Ø***			***3Ø***	***3Ø***
56C	1/3	70.0	70.0	80.0	80.0	***56CH***	1/3	–	–
	1/2						1/2		
	3/4						3/4		
	1						1	70.0	80.0
	1-1/2			85.0	85.0		1-1/2		85.0
	2		74.0	85.0	85.0		2		85.0
	3	–	–	–	88.0		3	–	88.0
** TC-frame motors have the same sound ratings as the comparable T-frame motors.*									

Shipping Crate Dimensions

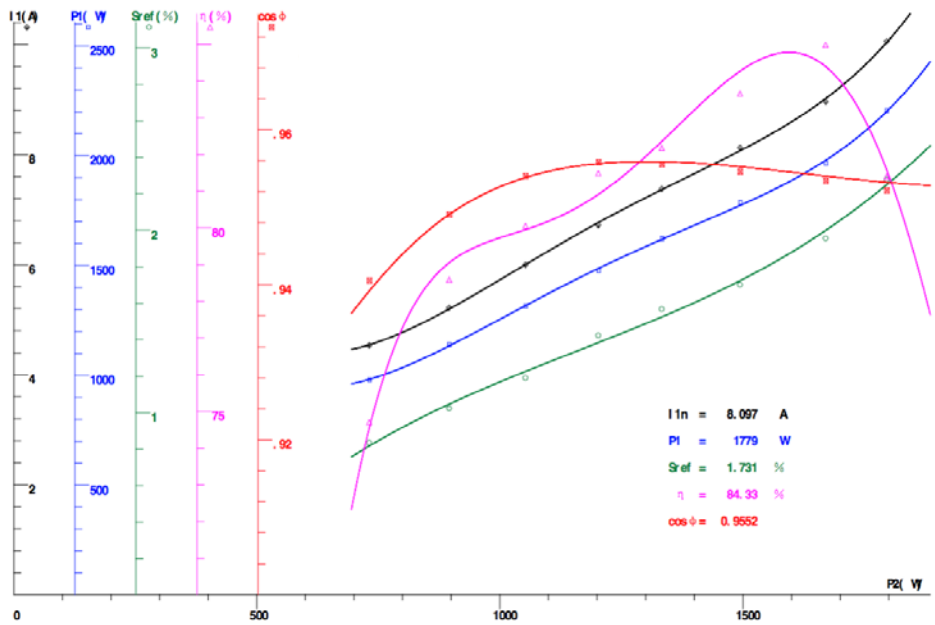
Nominal Shipping Crate Dimensions							
Frame Size *	HP	Width x Depth x Height (in)					
		MTF	MTR2	MTRP	MTCP2	MTDP	MTF2
56C	1/3	–	13.5 x 11 x 11	–	–	–	–
	1/2						
	3/4						
	1		14 x 11 x 11				
	1-1/2						
	2		14.5 x 11 x 11				
56HC	1	–	–	14 x 11 x 11.5	–	–	–
	1-1/2		14.5 x 11 x 11	15 x 11 x 11.5 (1800 RPM) 14 x 11 x 15 (3600 RPM)			
	2		16 x 11 x 11	15.5 x 11 x 11.5 (1800 RPM) 14 x 11 x 15.5 (3600 RPM)			
	3			15 x 11 x 11.5			
143T	1	–	–	–	18.9 x 12.99 x 10.63	14.4 x 11.4 x 11	–
143T	1-1/2						
145T	1-1/2						
145T	2						
182T	1-1/2				21.46 x 15.55 x 12.99	18.1 x 13 x 11	20.685 x 14.972 x 15.169
182T	2	18 x 14 x 14			–		
182T	3	–			21.46 x 15.55 x 12.99		
184T	2						
184T	3	19 x 14 x 14			–		
184T	5	21.5 x 14 x 14			21.46 x 15.55 x 12.99		
213T	3	–			26.38 x 17.91 x 14.96	19.3 x 14.6 x 14.6	–
213T	7-1/2						
215T	5						23.443 x 17.73 x 16.942
215T	10						
254T	1-1/2				32.68 x 22.05 x 19.09	26.1 x 20.1 x 17.7	–
254T	15						
256T	10						
256T	20						
284T	15				34.65 x 23.23 x 21.46	27.4 x 21.9 x 20.3	
284T	25						
286T	20				34.65 x 23.23 x 21.46		
286T	30						
324T	40				37.80 x 26.77 x 22.83	30.7 x 22.8 x 22.2	
326T	50						
364T	60				41.73 x 28.74 x 25.98	–	
365T	75						
405T	100				43.70 x 34.25 x 29.13		
444T	125				49.61 x 35.83 x 32.68		
445T	150						
445/7T	200				53.54 x 35.83 x 32.68		
449T	250				62.99 x 36.22 x 33.86		
	300						

** TC-frame motors ship in the same crates as the comparable T-frame motors.*

Shipping weights are listed in the Motor Specifications tables in "Chapter 1: Getting Started."

Performance Curves for MTF2 Motors

MTF2-002-1B18-182



Tc (N.m.)	s (%)	sj (%)	P2 (W)	P1j (W)	I 1j (A)	η (%)	η j (%)	cos Φ	cosj Φ
9.749	2.278	2.250	1796	2201	10.04	81.40	81.58	0.9522	0.9532
9.037	1.956	1.999	1670	1979	9.018	84.99	84.40	0.9534	0.9540
8.064	1.700	1.732	1494	1773	8.07	83.66	84.27	0.9546	0.9552
7.184	1.567	1.524	1333	1618	7.362	82.18	82.35	0.9556	0.9559
6.473	1.422	1.383	1203	1487	6.763	81.49	80.91	0.9558	0.9556
5.652	1.189	1.226	1053	1317	6.002	80.05	79.95	0.9540	0.9538
4.802	1.022	1.046	895.9	1133	5.192	78.59	79.05	0.9491	0.9490
3.913	0.8333	0.8162	731.4	981.3	4.543	74.70	74.54	0.9405	0.9392

I 1 = 8.097 A P1n = 1779 W Sn = 1.731%
n = 1768.8 r/min η = 84.33% cos Φ = 0.9552

Rated Power	P1 (W)	I 1 (A)	S (%)	n (speed)	P2 (W)	T (N.m.)	η (%)	cos Φ
150%	4478	20.42	3.725	1732.9	2250	12.4	50.25	0.9534
125%	2398	10.94	2.437	1756.1	1875	10.2	78.17	0.9529
100%	1779	8.097	1.731	1768.8	1500	8.099	84.33	0.9552
75%	1401	6.377	1.302	1776.8	1125	6.048	80.32	0.9550
50%	994.1	4.595	0.8450	1784.8	750	4.013	75.44	0.9406
25%	1238	5.875	0.0541	1799.0	375	1.991	30.29	0.9163

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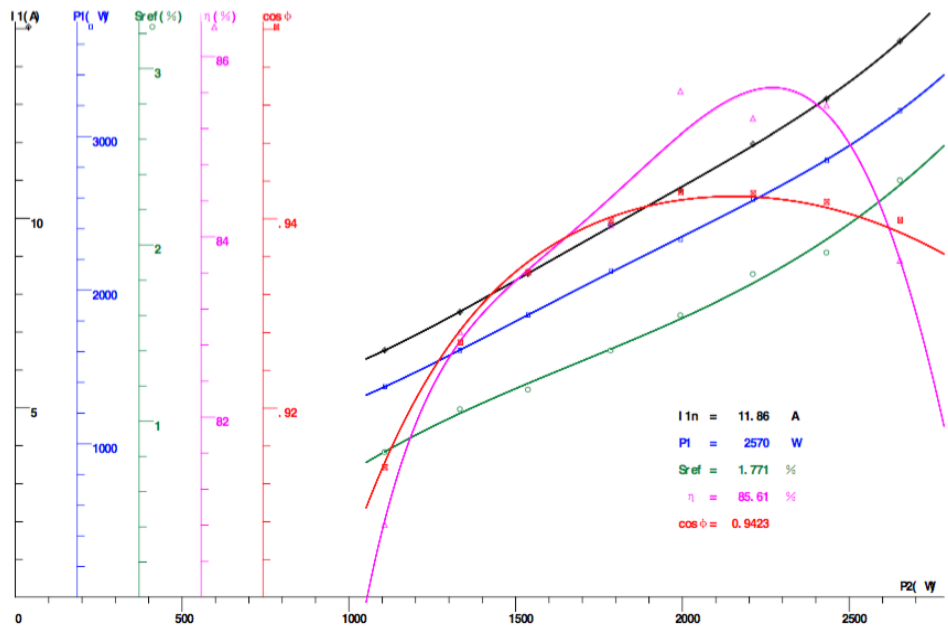
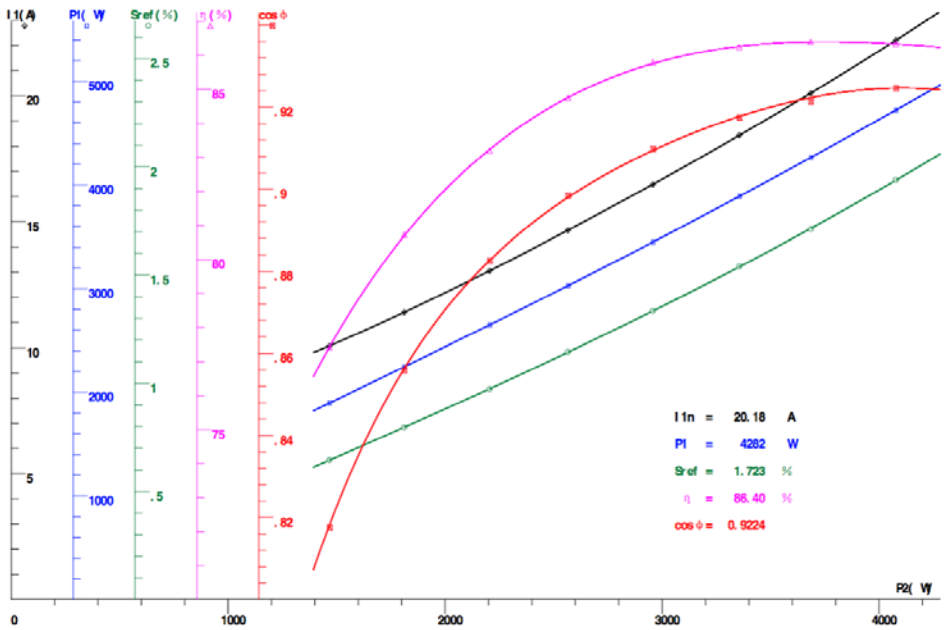


Tc (N.m.)	s (%)	sj (%)	P2 (W)	P1j (W)	I 1j (A)	η (%)	η j (%)	cos Φ	cosj Φ
14.41	2.367	2.340	2652	3167	14.67	83.74	83.75	0.9398	0.9386
13.16	1.956	2.031	2432	2849	13.16	85.46	85.37	0.9418	0.9412
11.95	1.833	1.782	2211	2583	11.92	85.31	85.62	0.9427	0.9423
10.75	1.600	1.579	1994	2342	10.81	85.61	85.13	0.9428	0.9420
9.606	1.400	1.408	1785	2114	9.778	84.13	84.43	0.9399	0.9402
8.251	1.178	1.213	1537	1838	8.541	83.62	83.63	0.9343	0.9354
7.148	1.067	1.043	1333	1609	7.537	82.94	82.84	0.9269	0.9282
5.922	0.8222	0.8246	1107	1369	6.513	80.81	80.84	0.9137	0.9142

I 1 = 11.86 A P1n = 2570 W Sn = 1.771%
n = 1768.1 r/min η = 85.61% cos Φ = 0.9423

Rated Power	P1 (W)	I 1 (A)	S (%)	n (speed)	P2 (W)	T (N.m.)	η (%)	cos Φ
150%	4854	22.85	3.781	1731.9	3300	18.20	67.98	0.9235
125%	3336	15.48	2.503	1755.0	2750	14.96	82.45	0.9369
100%	2570	11.86	1.771	1768.1	2200	11.88	85.61	0.9423
75%	1965	9.106	1.303	1776.6	1650	8.870	83.99	0.9380
50%	1362	6.484	0.8171	1785.3	1100	5.884	80.74	0.9136
25%	1042	5.388	0.0320	1799.4	550	2.919	52.80	0.8404

MTF2-005-1B18

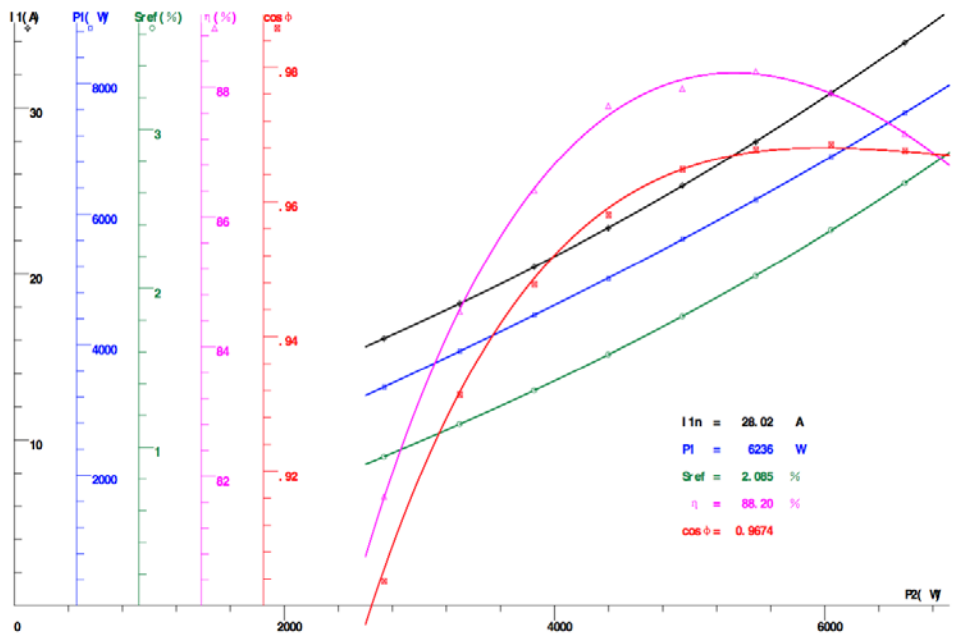


Tc (N.m.)	s (%)	sj (%)	P2 (W)	P1j (W)	I 1j (A)	η (%)	η j (%)	cos Φ	cosj Φ
22.06	1.939	1.938	4078	4723	22.21	86.34	86.34	0.9246	0.9246
19.89	1.711	1.714	3685	4265	20.11	86.41	86.40	0.9214	0.9223
18.08	1.539	1.537	3356	3890	18.43	86.25	86.27	0.9174	0.9177
15.9	1.333	1.333	2957	3448	16.49	85.80	85.76	0.9098	0.9094
13.77	1.144	1.143	2566	3028	14.66	84.75	84.76	0.8984	0.8980
11.81	0.9722	0.9735	2205	2649	13.05	83.20	83.23	0.8825	0.8826
9.688	0.7944	0.7956	1811	2245	11.40	80.73	80.69	0.8558	0.8562
7.833	0.6444	0.6436	1467	1895	10.07	77.41	77.42	0.8175	0.8180

I 1 = 20.18 A P1n = 4282 W Sn = 1.723%
n = 1769.0 r/min η = 86.40% cos Φ = 0.9224

Rated Power	P1 (W)	I 1 (A)	S (%)	n (speed)	P2 (W)	T (N.m.)	η (%)	cos Φ
150%	6483	31.90	2.917	1747.5	5550	30.33	85.60	0.8837
125%	5376	25.40	2.273	1759.1	4625	25.11	86.04	0.9203
100%	4282	20.18	1.723	1769.0	3700	19.97	86.40	0.9224
75%	3251	15.62	1.243	1777.6	2775	14.91	85.37	0.9046
50%	2284	11.56	0.8128	1785.4	1850	9.896	80.99	0.8595
25%	1341	8.285	0.4092	1792.6	925	4.928	68.97	0.7038

MTF2-7P5-1B18-215

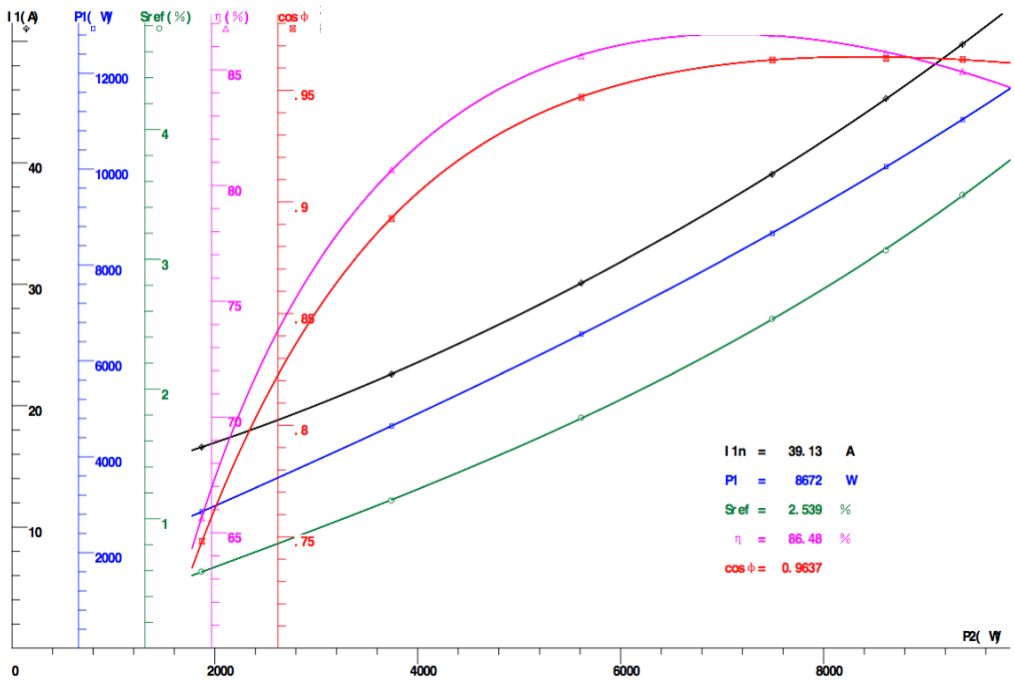


Tc (N.m.)	s (%)	sj (%)	P2 (W)	P1j (W)	I 1j (A)	η (%)	η j (%)	cos Φ	cosj Φ
35.93	2.661	2.662	6593	7552	33.94	87.28	87.29	0.9676	0.9675
32.85	2.367	2.363	6046	6878	30.89	87.91	87.90	0.9685	0.9680
29.74	2.078	2.080	5490	6224	27.97	88.24	88.20	0.9677	0.9674
26.72	1.822	1.823	4945	5612	25.29	87.98	88.12	0.9648	0.9648
23.71	1.583	1.582	4399	5023	22.77	87.71	87.57	0.9580	0.9590
20.70	1.356	1.356	3849	4453	20.41	86.40	86.44	0.9477	0.8486
17.70	1.144	1.143	3299	3901	18.20	84.54	84.57	0.9313	0.9317
14.66	0.9389	0.9394	2738	3353	16.10	81.68	81.66	0.9036	0.9054

I 1 = 28.02 A P1n = 6236 W Sn = 2.085%
n = 1762.5 r/min η = 88.20% cos Φ = 0.9674

Rated Power	P1 (W)	I 1 (A)	S (%)	n (speed)	P2 (W)	T (N.m.)	η (%)	cos Φ
150%	9813	44.19	3.719	1733.1	8250	45.46	84.07	0.9655
125%	7914	35.58	2.826	1749.1	6875	37.54	86.87	0.9670
100%	6236	28.02	2.085	1762.5	5500	29.80	88.20	0.9674
75%	4737	21.58	1.468	1773.6	4125	22.21	87.09	0.9545
50%	3364	16.14	0.9437	1783.0	2750	14.73	81.74	0.9061
25%	2056	11.48	0.4838	1791.3	1375	7.331	66.89	0.7784

MTF2-010-1B18



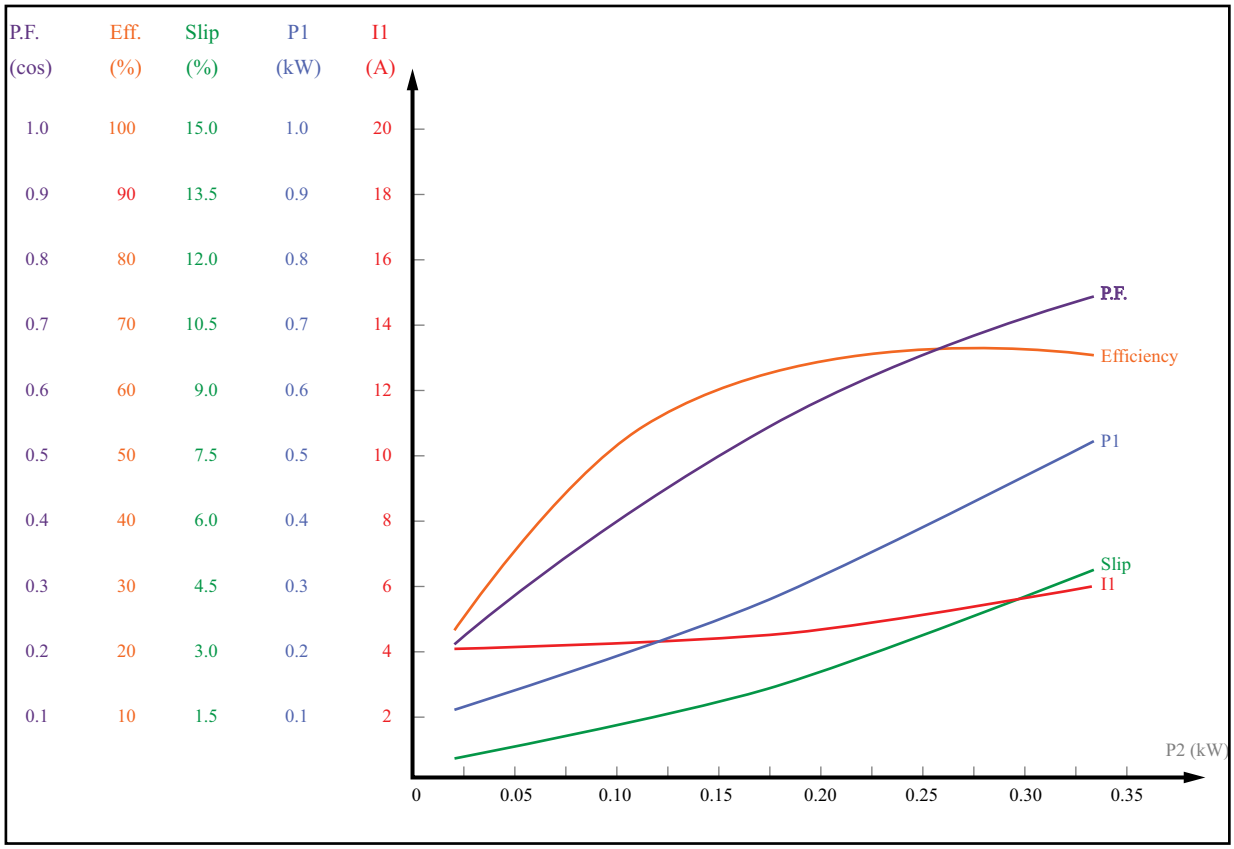
Tc (N.m.)	s (%)	sj (%)	P2 (W)	P1j (W)	I 1j (A)	η (%)	η j (%)	cos Φ	cosj Φ
51.50	3.494	3.488	9368	11034	49.78	84.93	84.91	0.9638	0.9637
47.14	3.067	3.078	8613	10042	45.25	85.71	85.77	0.9643	0.9650
40.78	2.539	2.536	7492	8663	39.08	86.55	86.48	0.9636	0.9637
30.30	1.778	1.772	5610	6551	30.07	85.59	85.64	0.9468	0.9471
20.07	1.139	1.144	3741	4639	22.59	80.67	80.64	0.8925	0.8928
9.975	0.5889	0.5873	1869	2848	16.57	65.63	65.63	0.7479	0.7473

I 1 = 39.13 A P1n = 8672 W Sn = 2.539%
n = 1754.3 r/min η = 86.48% cos Φ = 0.9637

Rated Power	P1 (W)	I 1 (A)	S (%)	n (speed)	P2 (W)	T (N.m.)	η (%)	cos Φ
150%	13771	62.67	4.695	1715.5	11250	62.63	81.70	0.9553
125%	11042	49.82	3.492	1737.1	9375	51.54	84.90	0.9637
100%	8672	39.13	2.539	1754.3	7500	40.83	86.48	0.9637
75%	6567	30.14	1.777	1768.0	5625	30.38	85.66	0.9473
50%	4648	22.62	1.147	1779.3	3750	20.13	80.68	0.8932
25%	2853	16.58	0.5891	1789.4	1875	10.01	65.71	0.7480

Performance Curves for MTR2 Motors

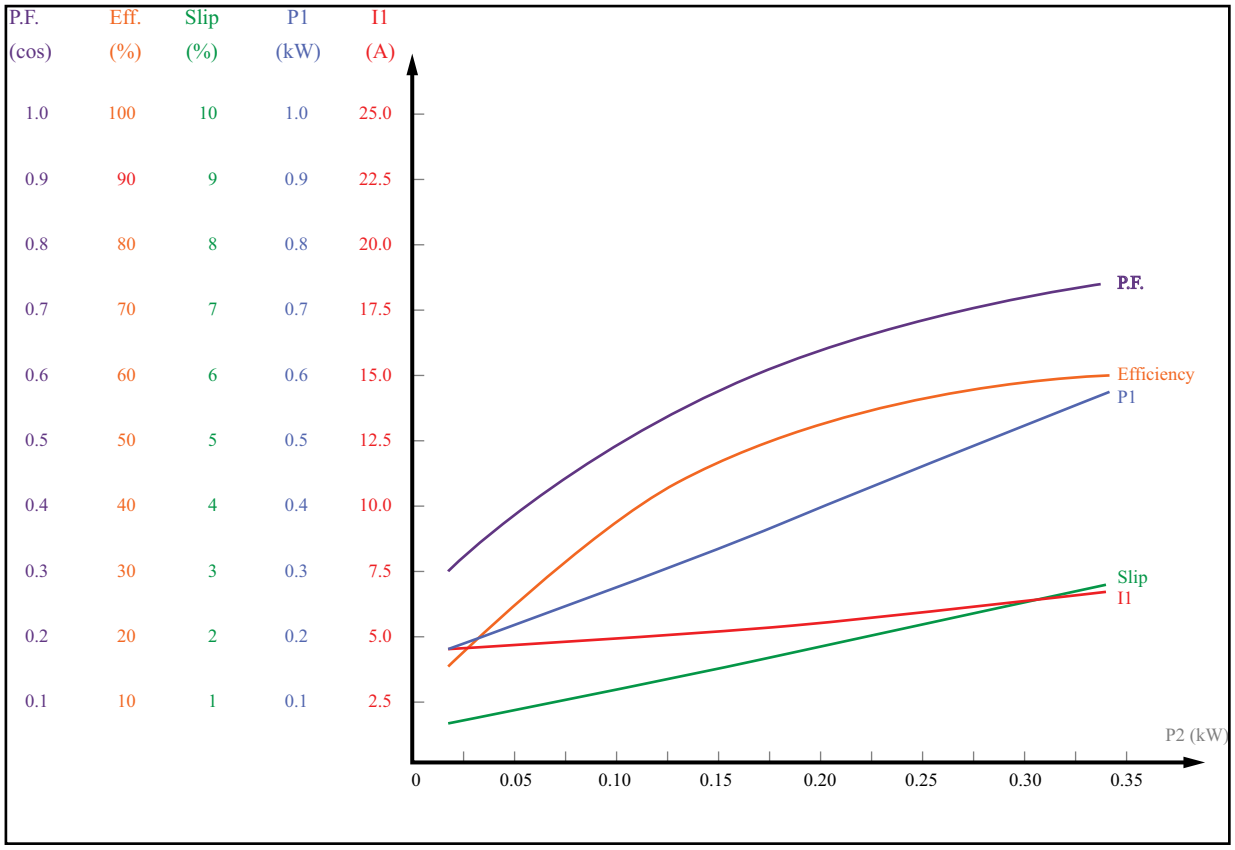
MTR2-P33-1AB18



Performance Data - MTR2-P33-1AB18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.0672	116.0	4.10	0.1574	0.36	1783	42.72	0.33
0.1170	115.8	4.23	0.2123	0.63	1773	55.12	0.43
0.1371	115.7	4.32	0.2362	0.74	1769	58.06	0.47
0.1716	115.6	4.49	0.2761	0.93	1761	62.16	0.53
0.2057	115.5	4.69	0.3169	1.12	1753	64.92	0.59
0.2429	115.3	5.01	0.3696	1.33	1743	65.73	0.64
0.2865	115.1	5.42	0.4322	1.58	1730	66.28	0.69
0.3172	114.9	5.78	0.4808	1.76	1719	65.97	0.72

Load Performance Data - MTR2-P33-1AB18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	4.10	0.1540	0.89	40.60	0.327	0.06
50	4.26	0.2204	1.53	56.73	0.450	0.13
75	4.58	0.2956	2.32	63.43	0.561	0.19
100	5.07	0.3796	3.23	65.85	0.651	0.25
125	5.72	0.4725	4.28	66.13	0.718	0.31

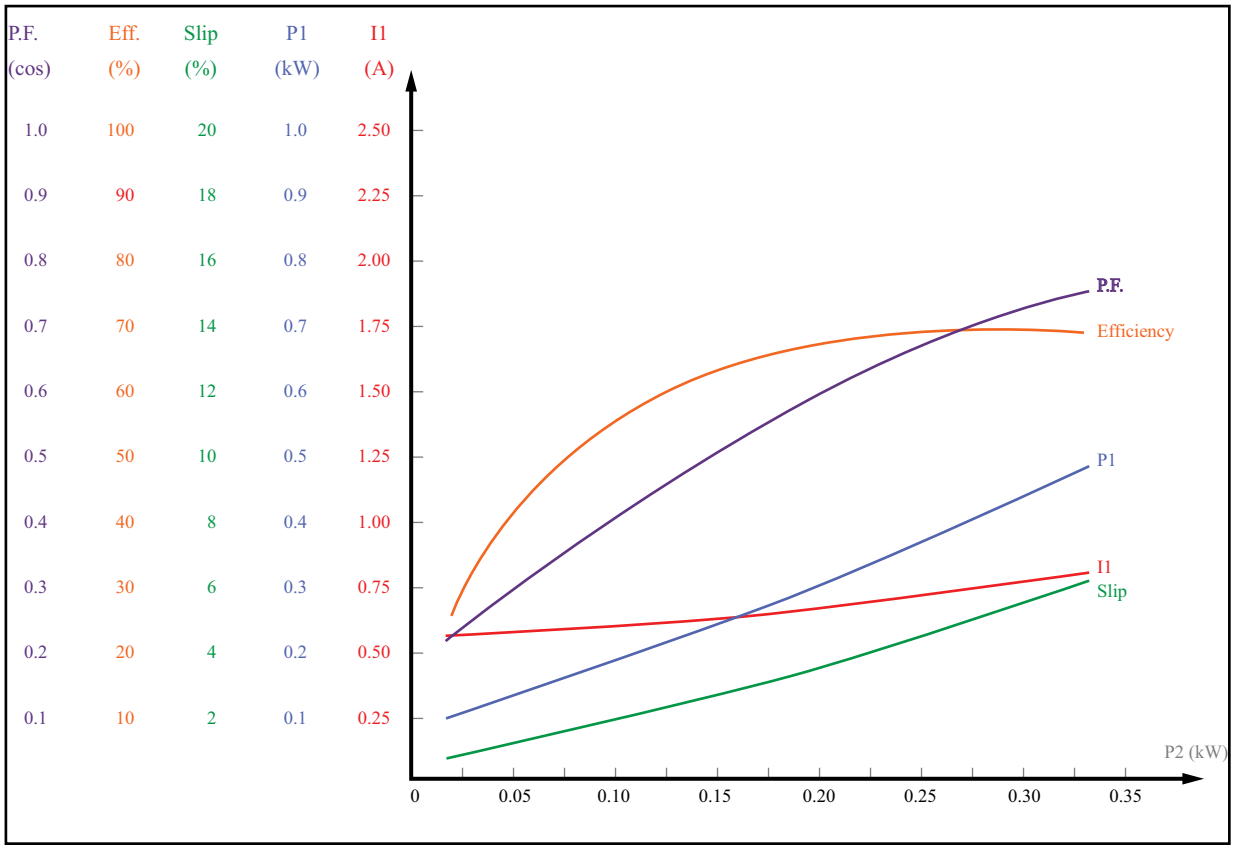
MTR2-P33-1AB36



Performance Data - MTR2-P33-1AB36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.0858	115.2	4.67	0.2505	0.23	3564.3	34.27	0.47
0.0970	115.2	4.73	0.2665	0.26	3561.3	36.38	0.49
0.1302	115.1	4.90	0.3056	0.35	3554.1	42.63	0.54
0.1744	115.0	5.16	0.3576	0.47	3543.7	48.76	0.60
0.2073	115.0	5.39	0.3967	0.56	3535.6	52.26	0.64
0.2437	114.9	5.66	0.4387	0.66	3526.8	55.55	0.67
0.2763	114.8	5.93	0.4798	0.75	3519.2	57.59	0.70
0.3195	115.7	6.37	0.5389	0.87	3508.2	59.29	0.73

Load Performance Data - MTR2-P33-1AB36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	4.58	0.2264	0.86	27.60	0.430	0.06
50	4.87	0.2979	1.26	41.96	0.532	0.13
75	5.25	0.3720	1.67	50.40	0.616	0.19
100	5.72	0.4487	2.09	55.71	0.682	0.25
125	6.29	0.5280	2.53	59.19	0.730	0.31

MTR2-P33-3BD18

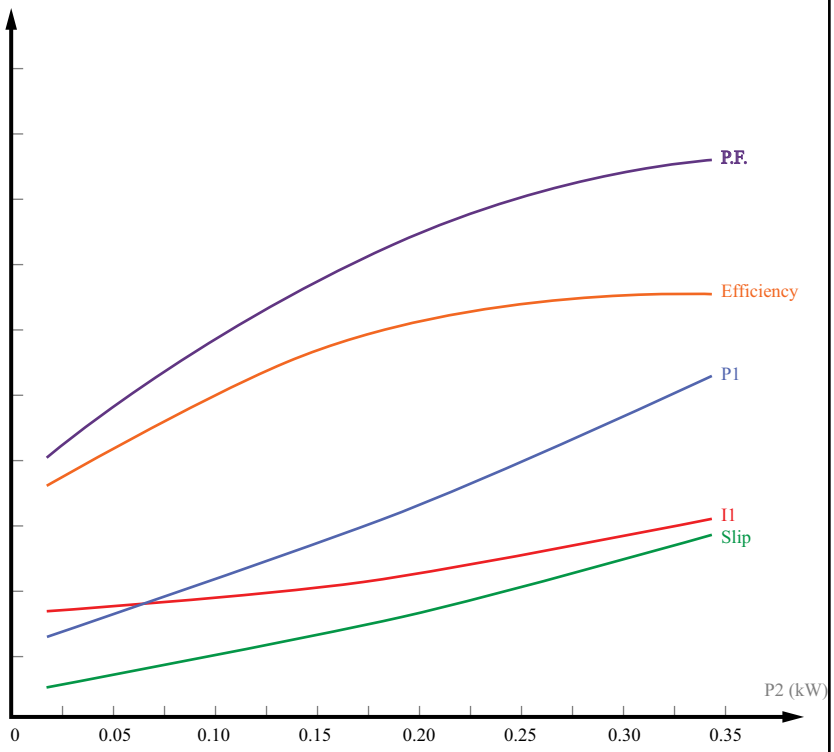


Performance Data - MTR2-P33-3BD18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.0582	460.9	0.56	0.1350	0.30	1780	43.15	0.31
0.1112	460.8	0.58	0.1940	0.61	1764	57.30	0.42
0.1320	460.8	0.59	0.5180	0.74	1758	60.56	0.47
0.1591	460.8	0.61	0.2500	0.90	1749	63.63	0.52
0.2072	460.7	0.65	0.3090	1.17	1734	67.05	0.60
0.2384	460.7	0.68	0.3490	1.35	1723	68.32	0.65
0.2682	460.7	0.71	0.3890	1.54	1712	68.95	0.69
0.3075	460.6	0.76	0.4440	1.78	1696	69.25	0.73

Load Performance Data - MTR2-P33-3BD18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	0.56	0.1400	1.28	44.66	0.315	0.06
50	0.58	0.2095	2.19	59.67	0.450	0.13
75	0.63	0.2845	3.24	65.91	0.569	0.19
100	0.69	0.3648	4.42	68.62	0.664	0.25
125	0.77	0.4506	5.74	69.35	0.735	0.31

MTR2-P33-3BD36

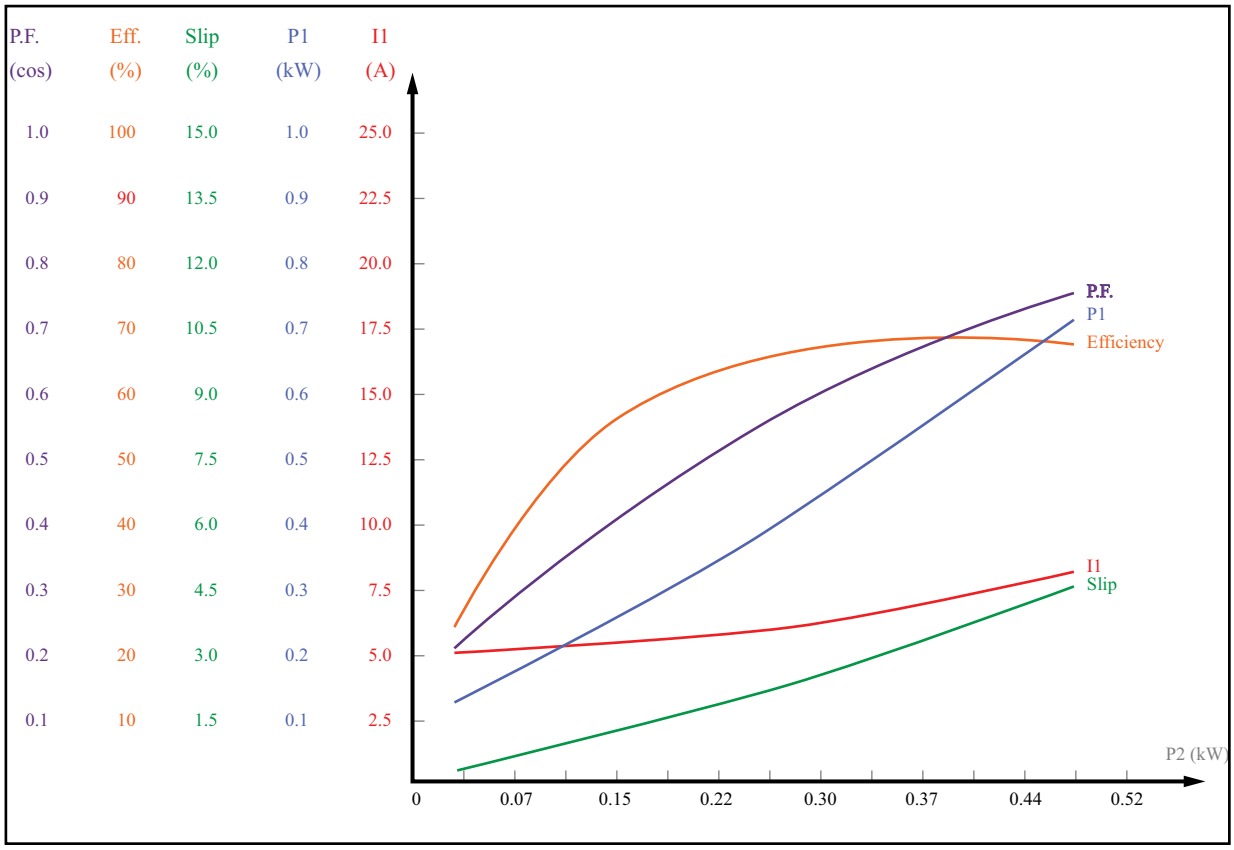
P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	15.0	1.0	2.50
0.9	90	13.5	0.9	2.25
0.8	80	12.0	0.8	2.00
0.7	70	10.5	0.7	1.75
0.6	60	9.0	0.6	1.50
0.5	50	7.5	0.5	1.25
0.4	40	6.0	0.4	1.00
0.3	30	4.5	0.3	0.75
0.2	20	3.0	0.2	0.50
0.1	10	1.5	0.1	0.25



Performance Data - MTR2-P33-3BD36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.1375	460.6	0.49	0.2530	0.34	3536	54.36	0.65
0.1452	460.6	0.50	0.2620	0.35	3534	55.43	0.66
0.1551	460.6	0.51	0.2740	0.38	3530	56.61	0.68
0.1790	460.5	0.53	0.3030	0.46	3520	59.08	0.72
0.2017	460.5	0.56	0.3310	0.52	3512	60.93	0.75
0.2499	460.5	0.62	0.3930	0.66	3491	63.60	0.80
0.2871	460.4	0.67	0.4430	0.78	3474	64.81	0.83
0.3180	460.4	0.72	0.4860	0.87	3459	65.44	0.85

Load Performance Data - MTR2-P33-3BD36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	0.43	0.1687	1.07	37.05	0.495	0.06
50	0.48	0.2385	1.61	52.42	0.627	0.13
75	0.54	0.3133	2.24	59.85	0.726	0.19
100	0.62	0.3932	2.94	63.58	0.797	0.25
125	0.71	0.4782	3.74	65.35	0.844	0.31

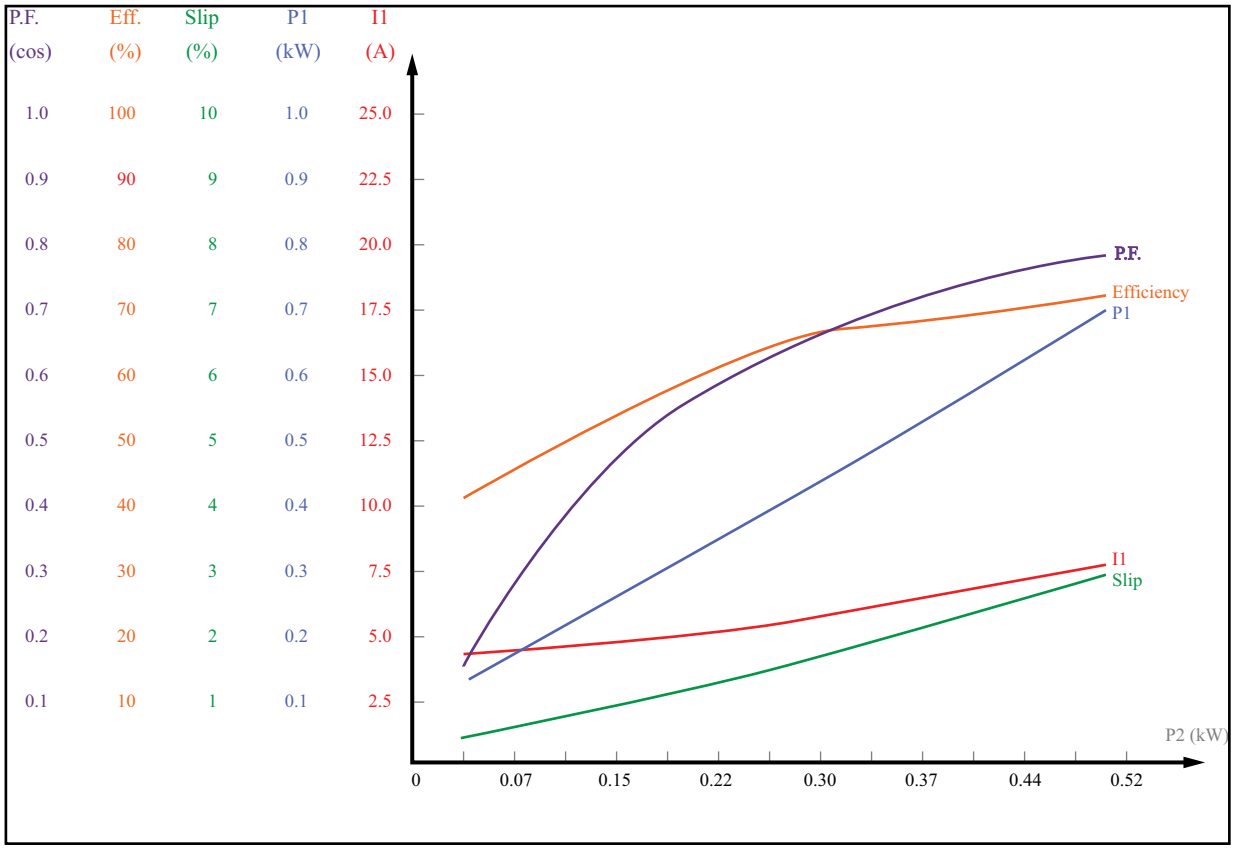
MTR2-P50-1AB18



Performance Data - MTR2-P50-1AB18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.0916	115.9	5.39	0.2005	0.49	1784	45.66	0.32
0.1562	115.7	5.58	0.2725	0.84	1775	57.32	0.42
0.2037	115.6	5.79	0.3264	1.10	1768	62.41	0.49
0.2364	115.4	5.96	0.3644	1.28	1763	64.87	0.53
0.3100	115.2	6.47	0.4573	1.69	1751	67.78	0.61
0.3614	116.0	6.91	0.5252	1.98	1743	68.82	0.66
0.4258	115.6	7.53	0.6160	2.35	1730	69.13	0.71
0.4532	115.5	7.85	0.6589	2.51	1724	68.78	0.73

Load Performance Data - MTR2-P50-1AB18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	5.39	0.2026	0.89	45.66	0.327	0.09
50	5.70	0.3038	1.58	60.89	0.464	0.19
75	6.23	0.4156	2.38	66.76	0.580	0.28
100	6.98	0.5381	3.28	68.76	0.670	0.37
125	7.95	0.6712	4.29	68.91	0.734	0.46

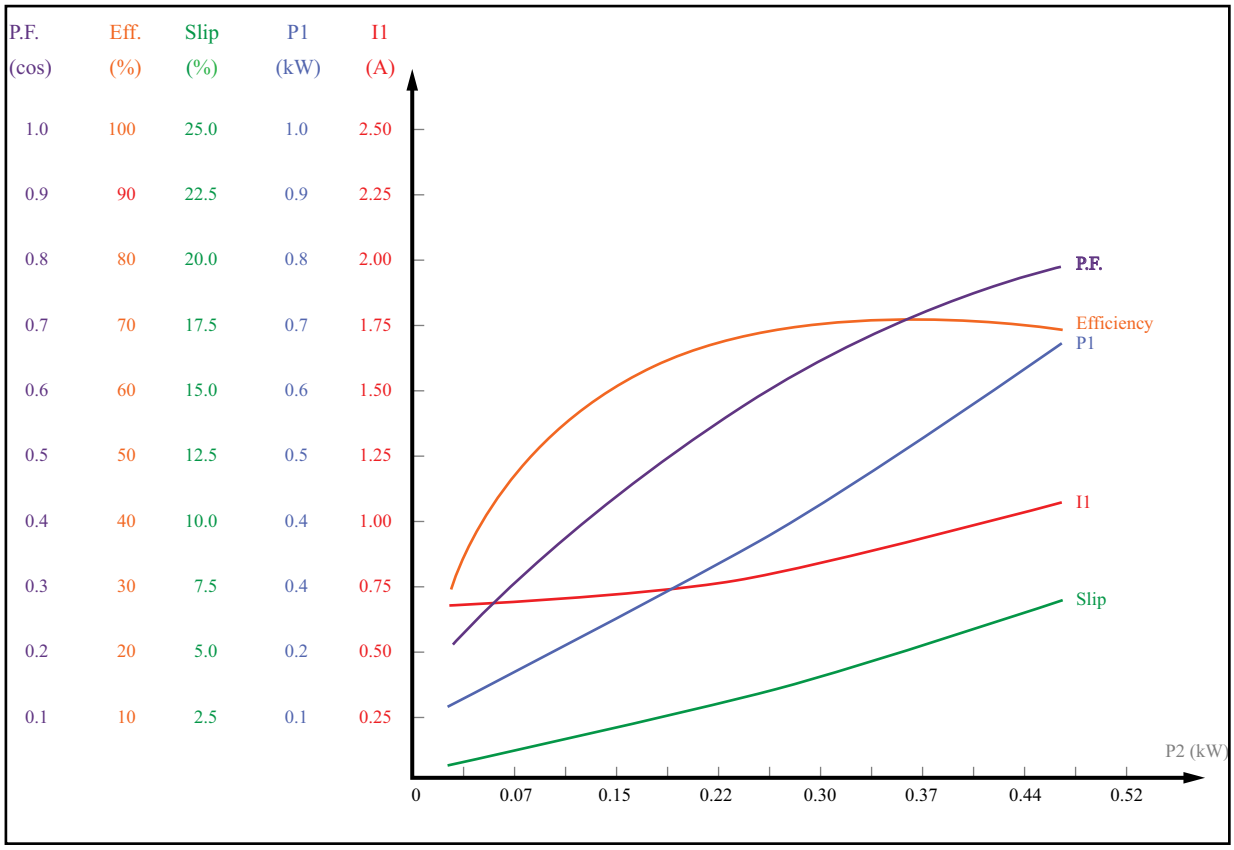
MTR2-P50-1AB36



Performance Data - MTR2-P50-1AB36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.1420	115.2	4.72	0.2625	0.38	3567	54.09	0.48
0.1494	115.2	4.75	0.2695	0.40	3566	55.44	0.49
0.1974	115.1	5.04	0.3294	0.53	3557	59.94	0.57
0.2489	115.0	5.37	0.3873	0.67	3547	64.27	0.63
0.3148	115.8	5.86	0.4632	0.85	3536	67.97	0.68
0.3510	115.7	6.20	0.5131	0.95	3527	68.41	0.72
0.4266	115.5	6.91	0.6069	1.16	3511	70.30	0.76
0.4694	115.4	7.32	0.6587	1.28	3501	71.27	0.78

Load Performance Data - MTR2-P50-1AB36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	4.46	0.2059	0.68	44.92	0.401	0.09
50	4.95	0.3122	1.10	59.27	0.548	0.19
75	5.58	0.4217	1.58	65.80	0.657	0.28
100	6.35	0.5346	2.10	69.21	0.732	0.37
125	7.26	0.6508	2.67	71.07	0.779	0.46

MTR2-P50-3BD18

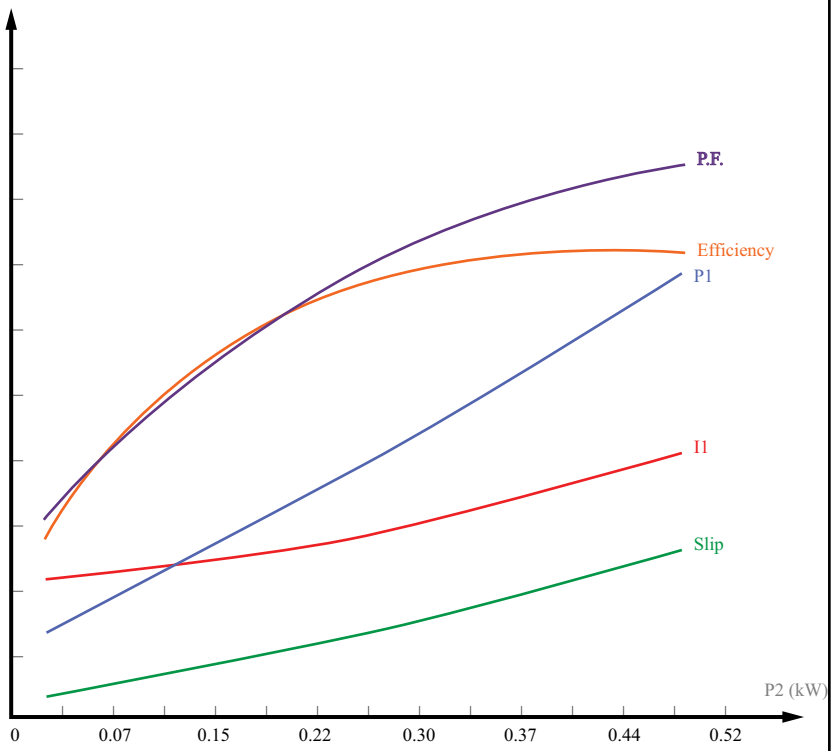


Performance Data - MTR2-P50-3BD18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.0784	460.5	0.68	0.1670	0.41	1780	46.97	0.31
0.1388	460.4	0.70	0.2340	0.76	1767	59.33	0.42
0.1898	460.2	0.74	0.2930	1.06	1755	64.78	0.50
0.2368	460.3	0.77	0.3490	1.32	1744	67.84	0.57
0.2947	460.2	0.82	0.4220	1.70	1728	60.84	0.64
0.3471	460.1	0.88	0.4910	2.01	1713	70.70	0.70
0.3957	460.1	0.95	0.5580	2.29	1698	70.91	0.74
0.4363	459.9	1.01	0.6180	2.55	1685	70.59	0.77

Load Performance Data - MTR2-P50-3BD18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	0.69	0.1826	1.25	50.65	0.335	0.09
50	0.73	0.2866	2.37	64.56	0.492	0.19
75	0.81	0.4000	3.64	69.37	0.623	0.28
100	0.91	0.5230	5.07	70.74	0.719	0.37
125	1.05	0.6555	6.66	70.55	0.784	0.46

MTR2-P50-3BD36

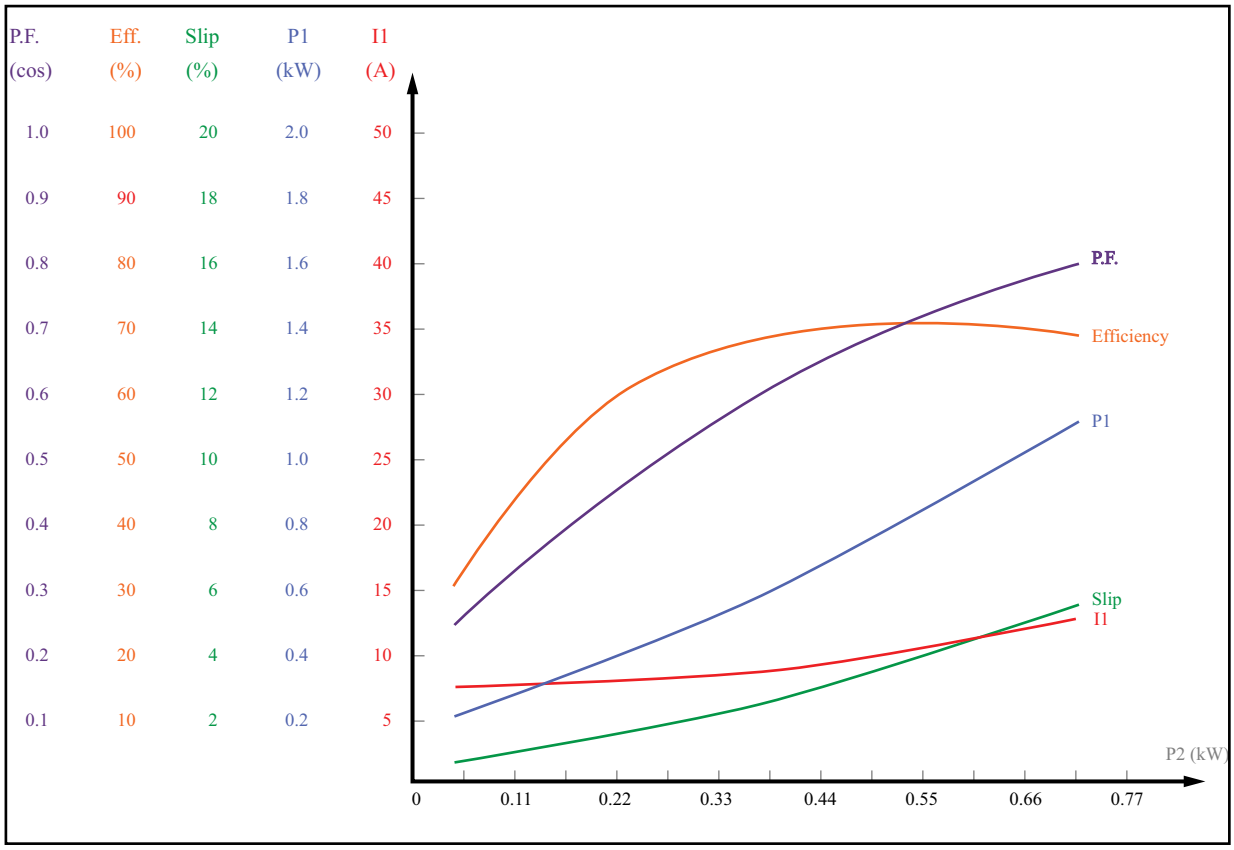
P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	15.0	1.0	2.50
0.9	90	13.5	0.9	2.25
0.8	80	12.0	0.8	2.00
0.7	70	10.5	0.7	1.75
0.6	60	9.0	0.6	1.50
0.5	50	7.5	0.5	1.25
0.4	40	6.0	0.4	1.00
0.3	30	4.5	0.3	0.75
0.2	20	3.0	0.2	0.50
0.1	10	1.5	0.1	0.25



Performance Data - MTR2-P50-3BD36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.1263	460.2	0.58	0.2360	0.34	3560	53.50	0.51
0.1486	460.2	0.60	0.2610	0.41	3554	56.93	0.55
0.1752	460.1	0.62	0.2910	0.49	3548	60.21	0.59
0.2471	460.1	0.69	0.3740	0.69	3530	66.08	0.68
0.2957	460.0	0.74	0.4320	0.83	3517	68.45	0.73
0.3455	459.9	0.80	0.4930	0.96	3503	70.09	0.77
0.4075	459.9	0.89	0.5720	1.15	3484	71.24	0.81
0.4540	459.8	0.95	0.6330	1.28	3469	71.72	0.83

Load Performance Data - MTR2-P50-3BD36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	0.56	0.1997	0.89	46.33	0.446	0.09
50	0.63	0.3019	1.45	61.29	0.601	0.19
75	0.72	0.4100	2.09	67.68	0.714	0.28
100	0.83	0.5241	2.80	70.60	0.790	0.37
125	0.97	0.6441	3.59	71.80	0.836	0.46

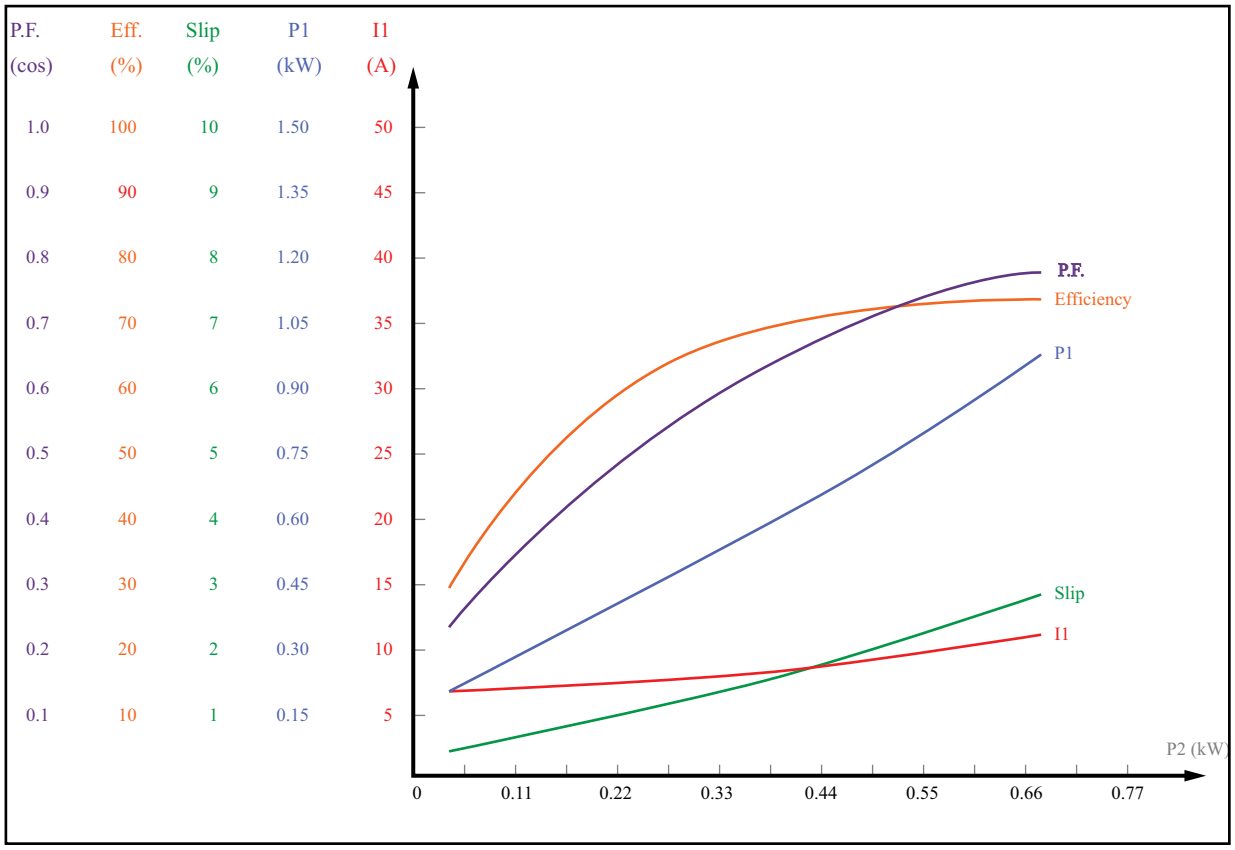
MTR2-P75-1AB18



Performance Data - MTR2-P75-1AB18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.1456	***115.2***	7.15	0.2919	0.78	1782	49.87	0.35
0.2120	***115.9***	7.42	0.3668	1.14	1775	57.81	0.43
0.2943	***115.6***	7.79	0.4595	1.59	1766	64.04	0.51
0.3666	***115.4***	8.20	0.5433	1.99	1758	67.48	0.57
0.4576	***115.0***	8.89	0.6628	2.50	1746	69.04	0.65
0.5352	***115.7***	9.60	0.7693	2.94	1737	69.57	0.07
0.6332	***115.3***	10.69	0.9174	3.51	1720	69.02	0.74
0.6855	***115.0***	11.37	1.0017	3.82	1711	68.43	0.77

Load Performance Data - MTR2-P75-1AB18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	7.16	0.2866	0.96	47.97	0.348	0.14
50	7.66	0.4344	1.68	63.30	0.493	0.28
75	8.52	0.6032	2.56	68.39	0.615	0.41
100	9.77	0.7928	3.60	69.37	0.706	0.55
125	11.37	1.0035	4.80	68.51	0.767	0.69

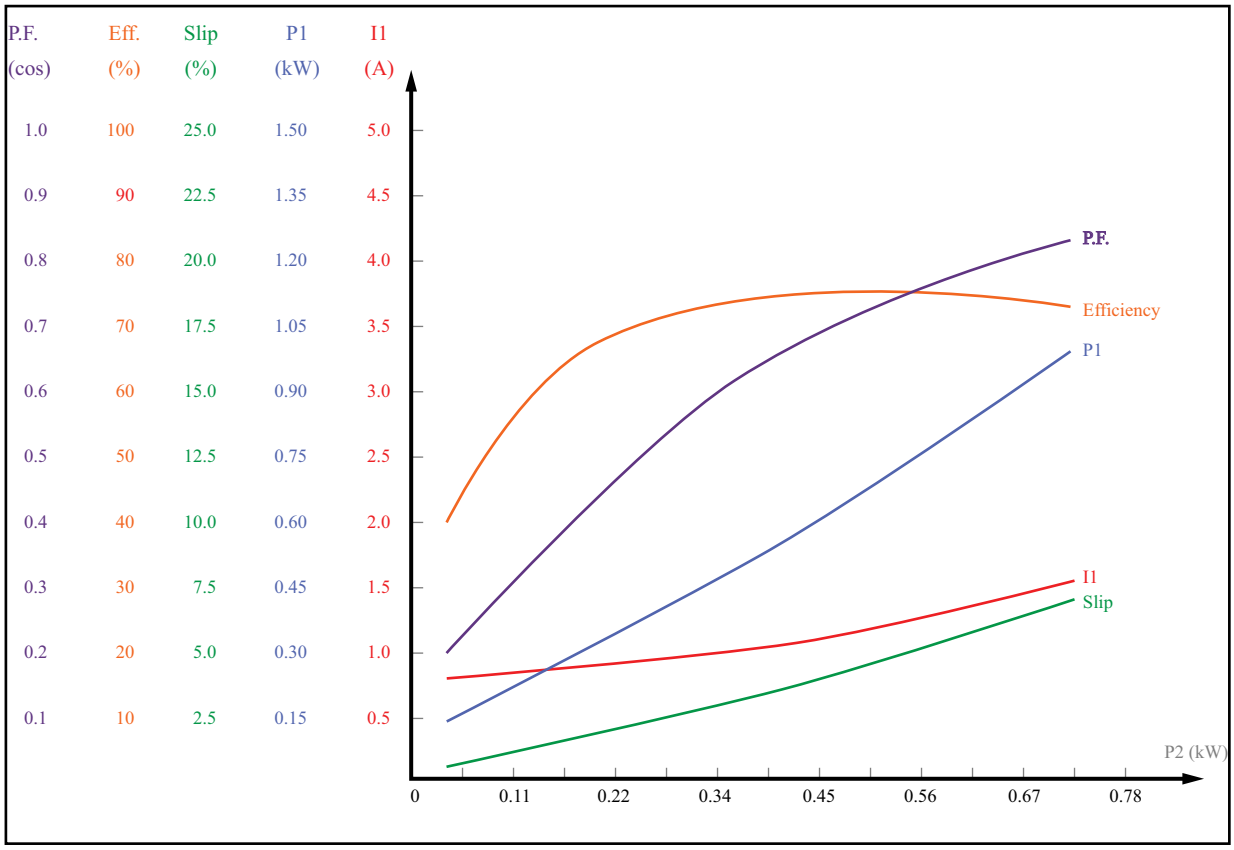
MTR2-P75-1AB36



Performance Data - MTR2-P75-1AB36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.1386	115.9	6.65	0.2901	0.37	3578	47.79	0.38
0.1945	115.8	6.85	0.3550	0.52	3571	54.79	0.45
0.2650	115.7	7.14	0.4249	0.71	3563	62.35	0.52
0.3608	115.6	7.69	0.5328	0.97	3551	67.72	0.60
0.4485	115.4	8.31	0.6375	1.21	3539	70.35	0.66
0.5320	115.2	9.00	0.7403	1.44	3527	71.87	0.71
0.6326	115.0	9.97	0.8719	1.72	3511	72.55	0.76
0.6541	115.0	10.19	0.8988	1.78	3507	72.77	0.77

Load Performance Data - MTR2-P75-1AB36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	6.64	0.2916	0.61	47.15	0.382	0.14
50	7.20	0.4370	1.04	62.93	0.528	0.28
75	8.04	0.5943	1.53	69.41	0.643	0.41
100	9.16	0.7635	2.08	72.04	0.725	0.55
125	10.56	0.9446	2.68	72.78	0.778	0.69

MTR2-P75-3BD18

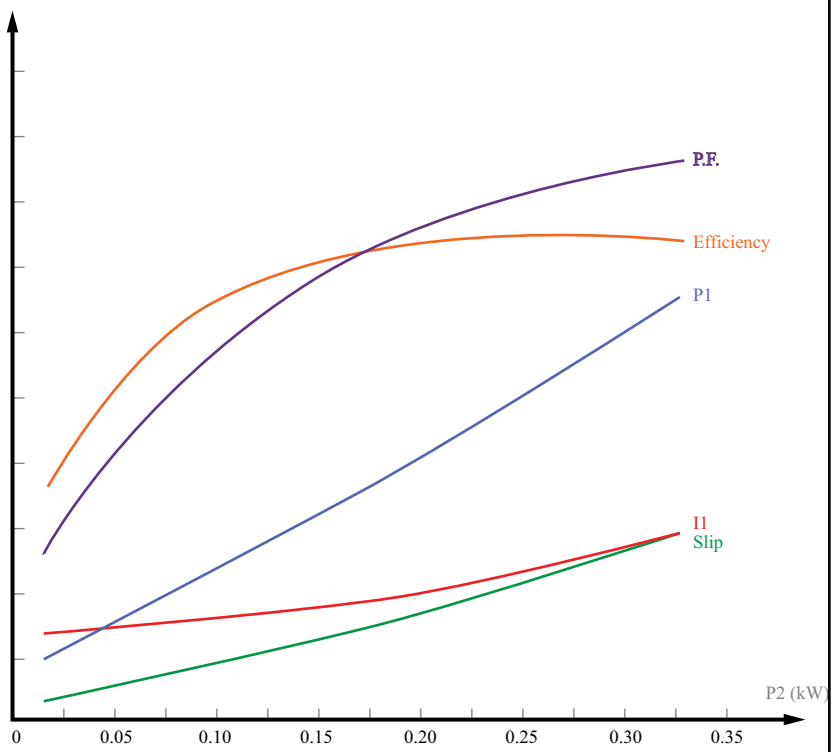


Performance Data - MTR2-P75-3BD18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.1144	460.9	0.83	0.2060	0.62	1782	55.56	0.31
0.2075	460.8	0.87	0.3090	1.16	1769	67.15	0.45
0.2857	460.7	0.92	0.3990	1.60	1757	71.61	0.54
0.3585	460.6	0.99	0.4860	2.02	1745	73.77	0.62
0.4412	460.6	1.08	0.5890	2.49	1731	74.91	0.69
0.5204	460.4	1.18	0.6930	2.98	1716	75.10	0.74
0.5971	460.3	1.29	0.7990	3.45	1701	74.74	0.78
0.6675	460.2	1.40	0.9020	3.90	1686	74.00	0.81

Load Performance Data - MTR2-P75-3BD18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	0.84	0.2342	1.28	59.77	0.352	0.14
50	0.92	0.3911	2.31	71.58	0.534	0.28
75	1.05	0.5625	3.55	74.67	0.671	0.42
100	1.23	0.7482	4.99	74.84	0.762	0.56
125	1.46	0.9484	6.63	73.81	0.815	0.70

MTR2-P75-3BD36

P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	15.0	1.50	5.0
0.9	90	13.5	1.35	4.5
0.8	80	12.0	1.20	4.0
0.7	70	10.5	1.05	3.5
0.6	60	9.0	0.90	3.0
0.5	50	7.5	0.75	2.5
0.4	40	6.0	0.60	2.0
0.3	30	4.5	0.45	1.5
0.2	20	3.0	0.30	1.0
0.1	10	1.5	0.15	0.5

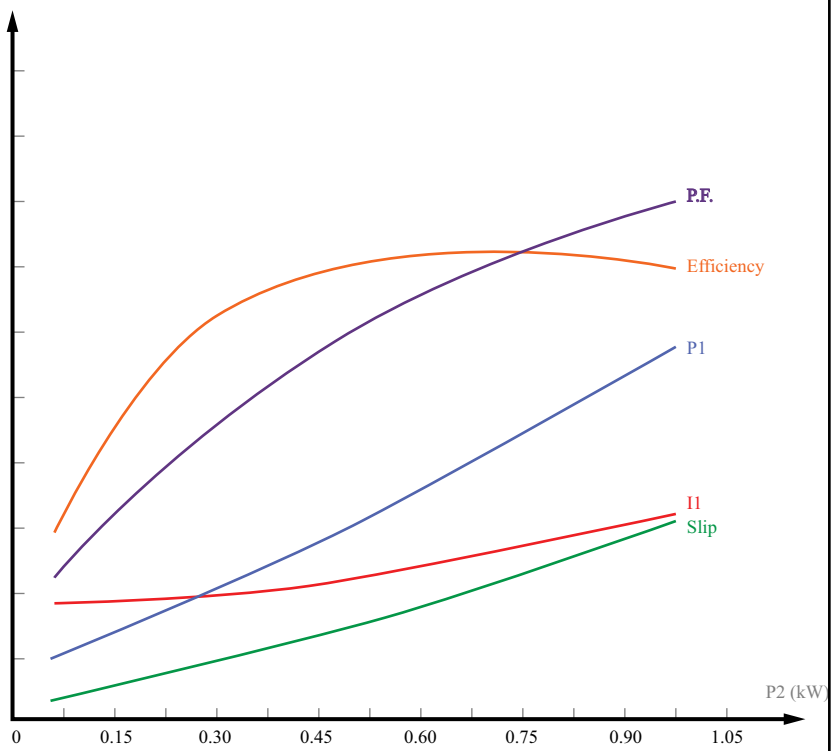


Performance Data - MTR2-P75-3BD36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.1569	460.4	0.73	0.2730	0.41	3564	57.46	0.47
0.2434	460.3	0.79	0.3690	0.65	3549	65.98	0.59
0.2986	460.2	0.84	0.4320	0.81	3538	69.12	0.64
0.3545	460.1	0.90	0.4970	0.97	3527	71.33	0.70
0.4555	460.0	1.01	0.6180	1.25	3506	73.71	0.77
0.5293	460.9	1.11	0.7100	1.46	3489	74.55	0.80
0.6055	460.8	1.22	0.8080	1.68	3471	74.94	0.83
0.6800	459.7	1.34	0.9080	1.89	3453	74.89	0.85

Load Performance Data - MTR2-P75-3BD36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	0.72	0.2554	0.92	54.82	0.446	0.14
50	0.83	0.4102	1.58	68.27	0.624	0.28
75	0.70	0.5749	2.33	73.06	0.744	0.42
100	1.15	0.7496	3.17	74.70	0.818	0.56
125	1.37	0.9344	4.10	74.92	0.856	0.70

MTR2-001-1AB18

P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	15.0	2.50	50
0.9	90	13.5	2.25	45
0.8	80	12.0	2.00	40
0.7	70	10.5	1.75	35
0.6	60	9.0	1.50	30
0.5	50	7.5	1.25	25
0.4	40	6.0	1.00	20
0.3	30	4.5	0.75	15
0.2	20	3.0	0.50	10
0.1	10	1.5	0.25	5

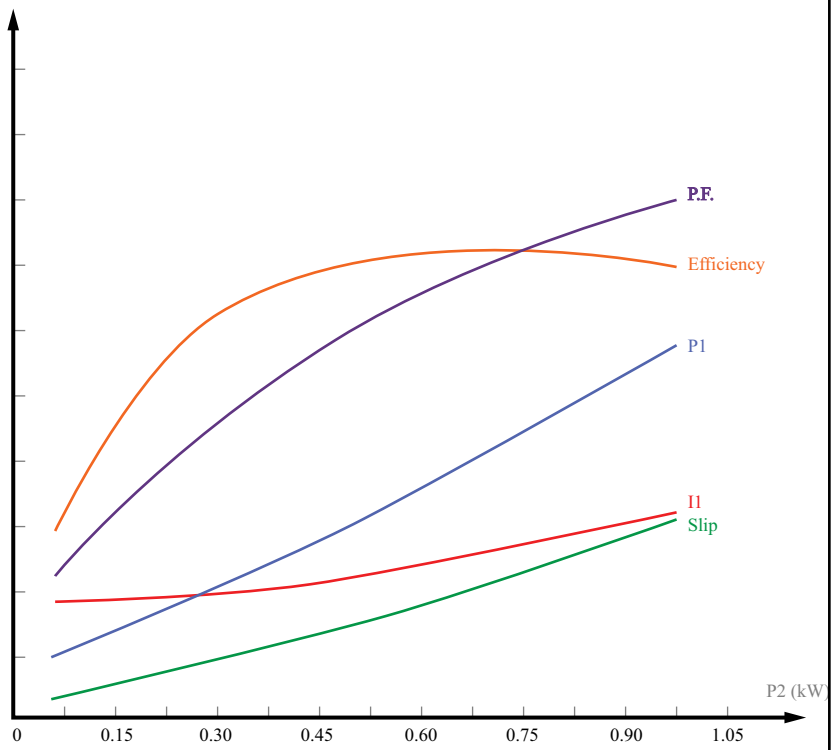


Performance Data - MTR2-001-1AB18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.2110	115.6	9.16	0.3910	1.13	1784	53.97	0.37
0.2960	115.5	9.47	0.4820	1.59	1778	61.42	0.44
0.4042	115.3	9.99	0.6040	2.18	1771	66.91	0.53
0.5023	115.1	10.62	0.7220	2.72	1763	69.56	0.59
0.6193	115.8	11.57	0.8720	3.37	1755	71.02	0.65
0.7223	115.7	12.47	1.0060	3.95	1746	71.79	0.70
0.8290	115.5	13.56	1.1540	4.56	1736	71.84	0.74
0.9342	115.2	14.85	1.3171	5.18	1726	70.93	0.77

Load Performance Data - MTR2-001-1AB18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	9.08	0.3675	0.86	51.02	0.352	0.19
50	9.85	0.5702	1.51	65.76	0.504	0.38
75	11.07	0.7964	2.27	70.63	0.626	0.56
100	12.75	1.0460	3.15	71.70	0.714	0.75
125	14.88	1.3191	4.14	71.07	0.771	0.94

MTR2-001-1AB36

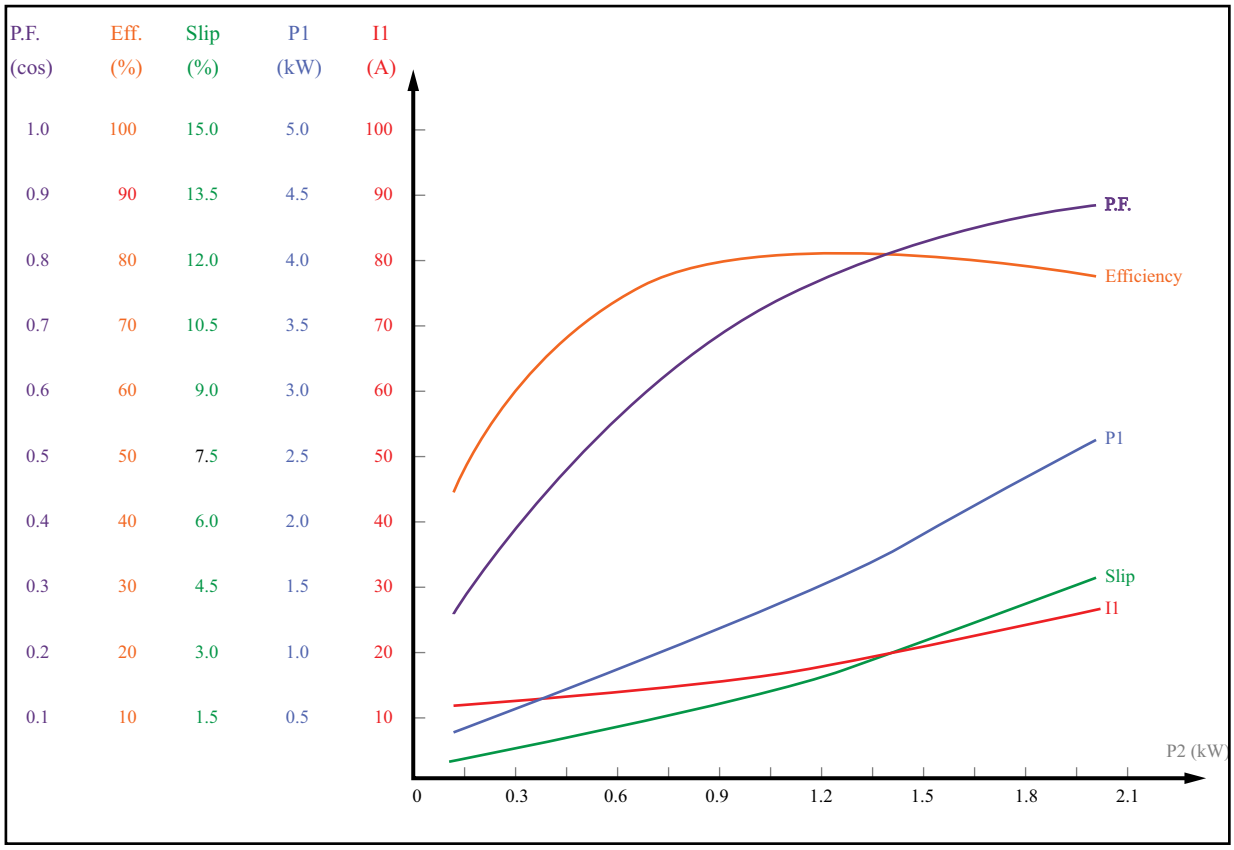
P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	15.0	2.50	50
0.9	90	13.5	2.25	45
0.8	80	12.0	2.00	40
0.7	70	10.5	1.75	35
0.6	60	9.0	1.50	30
0.5	50	7.5	1.25	25
0.4	40	6.0	1.00	20
0.3	30	4.5	0.75	15
0.2	20	3.0	0.50	10
0.1	10	1.5	0.25	5



Performance Data - MTR2-001-1AB36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.1760	114.9	6.28	0.3174	0.47	3577	0.1760	0.44
0.2727	115.8	6.79	0.4202	0.73	3567	0.2727	0.53
0.4093	115.5	7.64	0.5720	1.10	3552	0.4093	0.65
0.5080	115.3	8.43	0.6908	1.37	3540	0.5080	0.71
0.6280	116.1	9.50	0.8375	1.70	3527	0.6280	0.76
0.7250	115.9	10.51	0.9692	1.97	3513	0.7250	0.80
0.8635	115.6	12.13	1.1626	2.36	3492	0.8635	0.83
0.9335	115.4	13.03	1.2652	2.56	3480	0.9335	0.84

Load Performance Data - MTR2-001-1AB36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	6.34	0.3300	0.68	56.82	0.452	0.19
50	7.41	0.5324	1.19	70.44	0.624	0.38
75	8.89	0.7567	1.79	74.34	0.740	0.56
100	10.78	1.0028	2.49	74.79	0.809	0.75
125	13.08	1.2708	3.27	73.77	0.845	0.94

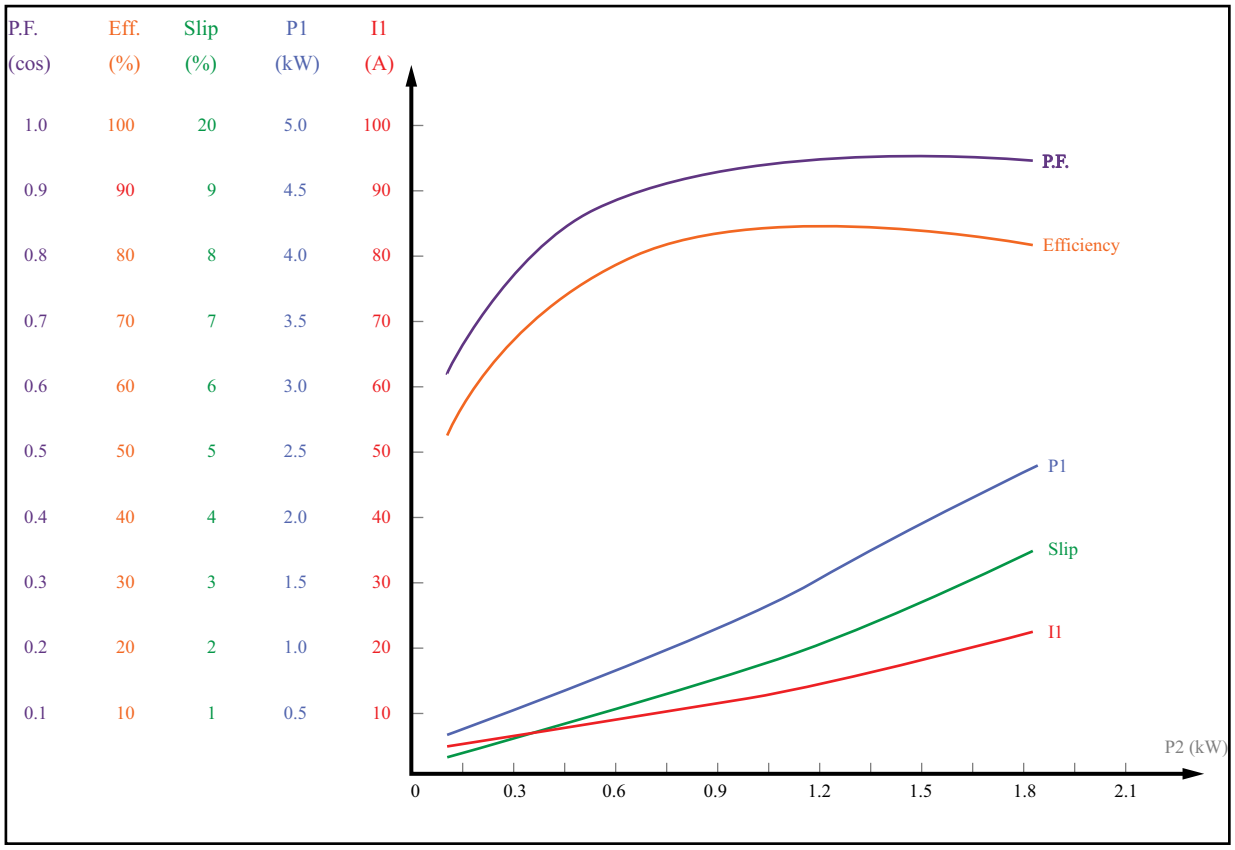
MTR2-002-1AB18



Performance Data - MTR2-002-1AB18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.3760	115.1	11.68	0.5858	2.01	1786	64.19	0.44
0.5816	115.7	12.63	0.7988	3.12	1780	72.81	0.55
0.8182	115.4	13.85	1.0457	4.41	1771	78.25	0.65
1.0346	116.1	15.45	1.2924	5.60	1764	80.05	0.72
1.2680	115.7	17.38	1.5732	6.90	1754	80.60	0.78
1.4453	115.4	19.07	1.7969	7.90	1746	80.43	0.82
1.7366	114.9	22.23	2.1852	9.57	1732	79.47	0.86
1.8752	114.7	23.98	2.3878	10.38	1724	78.53	0.87

Load Performance Data - MTR2-002-1AB18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	11.69	0.5882	0.77	63.76	0.438	0.38
50	13.49	0.9717	1.41	77.19	0.626	0.75
75	16.14	1.3988	2.18	80.43	0.754	1.13
100	19.63	1.8695	3.10	80.23	0.828	1.50
125	23.96	2.3839	4.14	78.65	0.865	1.88

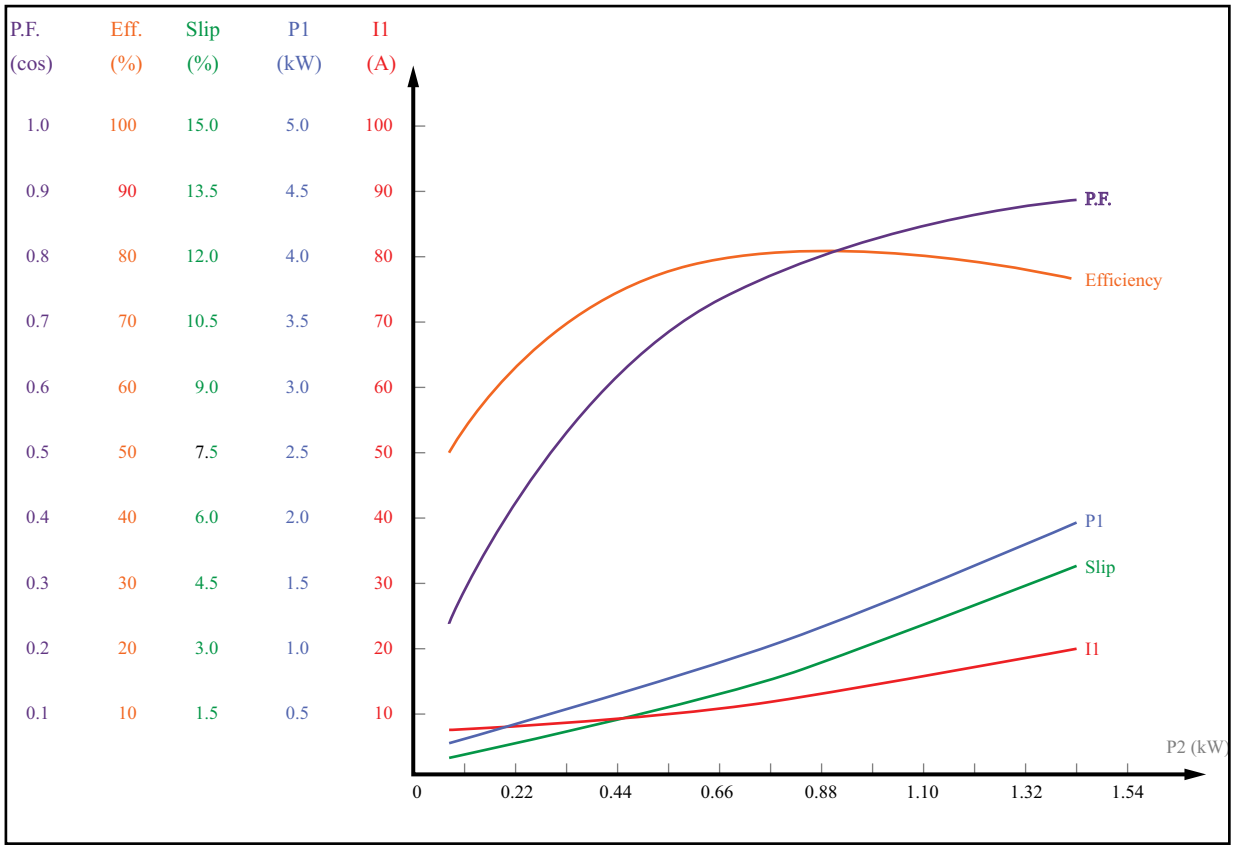
MTR2-002-1AB36



Performance Data - MTR2-002-1AB36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.3748	116.0	5.86	0.5413	1.00	3578	69.23	0.80
0.6236	115.6	7.80	0.7952	1.67	3565	78.42	0.88
0.8115	115.3	9.45	0.9960	2.18	3554	81.47	0.91
1.0057	116.0	11.24	1.2086	2.71	3543	83.20	0.93
1.2451	115.6	13.69	1.4854	3.37	3527	83.82	0.94
1.4601	115.2	16.18	1.7620	3.97	3510	82.87	0.95
1.7225	115.7	19.22	2.1052	4.71	3490	81.82	0.95
1.7682	115.6	19.79	2.1650	4.84	3487	81.67	0.95

Load Performance Data - MTR2-002-1AB36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	5.85	0.5440	0.60	68.94	0.809	0.38
50	8.89	0.9259	1.14	81.00	0.905	0.75
75	12.46	1.3481	1.78	83.45	0.941	1.13
100	16.56	1.8105	2.51	82.85	0.951	1.50
125	21.17	2.3130	3.34	81.06	0.950	1.88

MTR2-1P5-1AB18

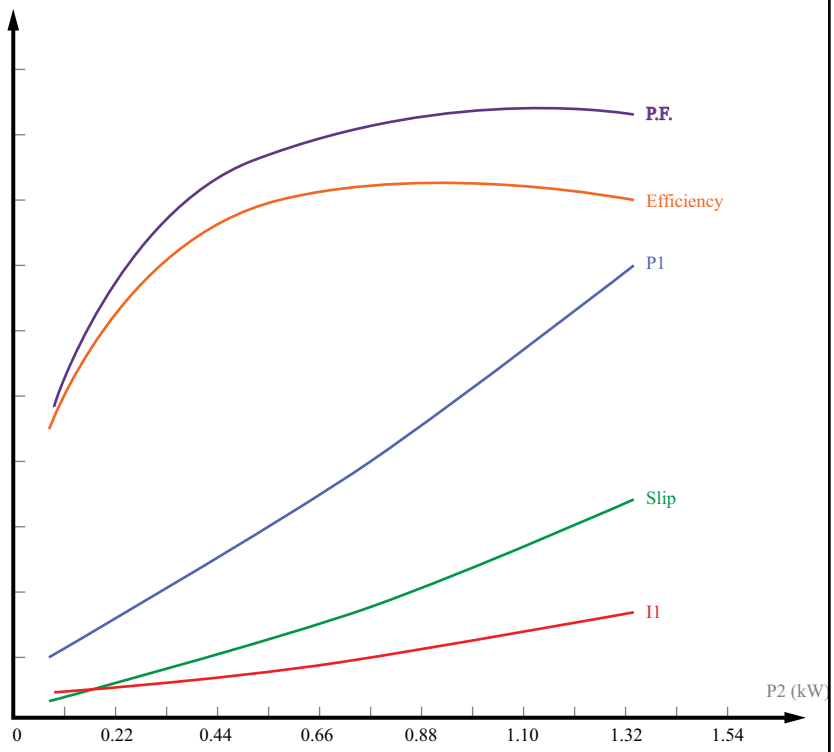


Performance Data - MTR2-1P5-1AB18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.2750	115.7	7.75	0.4180	1.47	1786	65.78	0.47
0.3982	115.5	8.33	0.5490	2.13	1780	72.35	0.57
0.5880	115.2	9.57	0.7568	3.17	1771	77.69	0.69
0.7278	115.0	10.64	0.9147	3.94	1763	79.56	0.75
0.9236	115.7	12.43	1.1484	5.03	1753	80.43	0.80
1.0843	115.4	14.09	1.3550	5.94	1742	80.02	0.83
1.2648	115.1	16.22	1.6034	6.98	1729	78.88	0.86
1.3773	114.8	17.70	1.7690	7.64	1720	77.86	0.87

Load Performance Data - MTR2-1P5-1AB18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	7.74	0.4223	0.78	65.11	0.475	0.28
50	9.30	0.7101	1.47	77.46	0.664	0.55
75	11.48	1.0282	2.29	80.16	0.780	0.83
100	14.27	1.3799	3.24	79.72	0.841	1.10
125	17.67	1.7619	4.33	78.04	0.867	1.38

MTR2-1P5-1AB36

P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	10	2.50	100
0.9	90	9	2.25	90
0.8	80	8	2.00	80
0.7	70	7	1.75	70
0.6	60	6	1.50	60
0.5	50	5	1.25	50
0.4	40	4	1.00	40
0.3	30	3	0.75	30
0.2	20	2	0.50	20
0.1	10	1	0.25	10

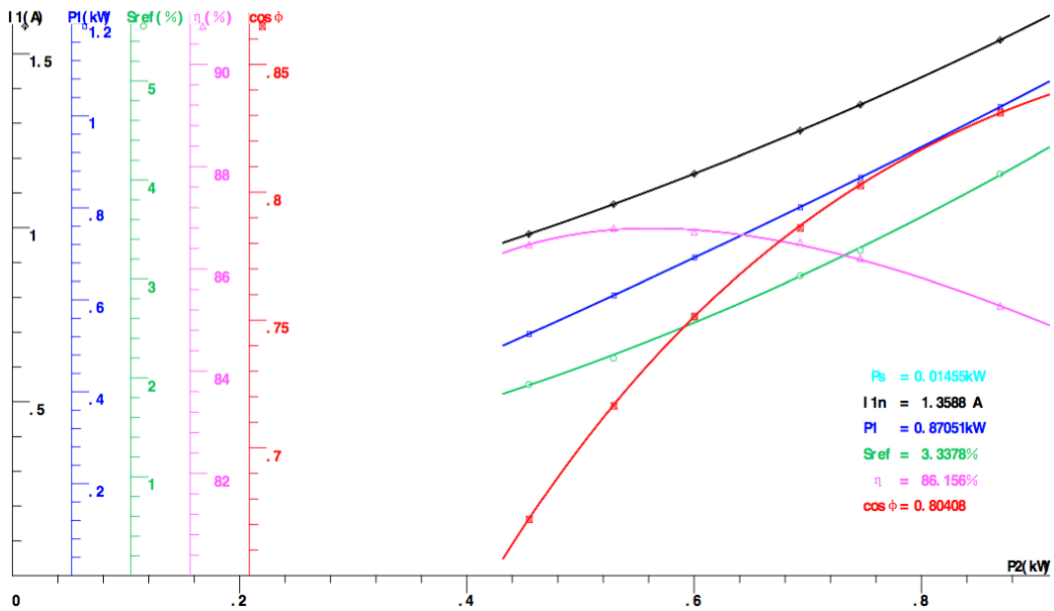


Performance Data - MTR2-1P5-1AB36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.2996	116.3	5.23	0.4448	0.80	3577	67.37	0.73
0.4407	116.1	6.22	0.5908	1.18	3566	74.60	0.82
0.6177	115.8	7.65	0.7767	1.66	3553	79.52	0.88
0.7238	115.6	8.61	0.8937	1.95	3544	80.99	0.90
0.9196	115.3	10.66	1.1335	2.49	3526	81.13	0.92
1.0630	115.0	12.18	1.3044	2.89	3512	81.49	0.93
1.2126	115.8	13.85	1.5002	3.31	3498	80.83	0.94
1.2830	115.6	14.74	1.5962	3.51	3490	80.38	0.94

Load Performance Data - MTR2-1P5-1AB36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	5.03	0.4214	0.60	65.25	0.729	0.28
50	7.11	0.7039	1.16	78.13	0.861	0.55
75	9.62	1.0148	1.79	81.30	0.917	0.83
100	12.56	1.3540	2.51	81.24	0.937	1.10
125	15.92	1.7215	3.32	79.87	0.940	1.38

Performance Curves for MTDP Motors

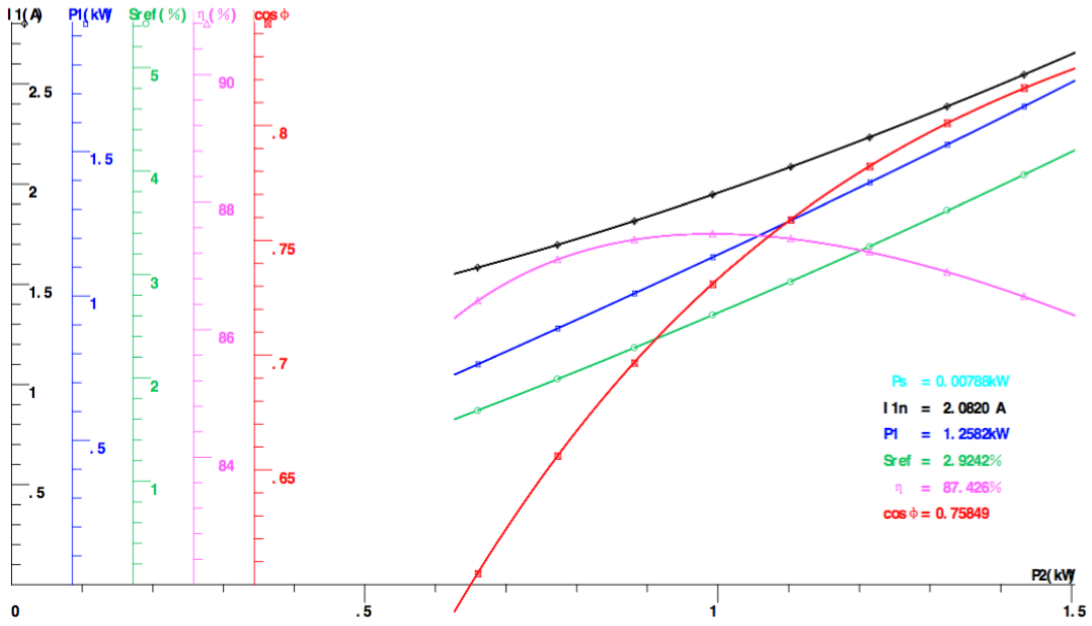
MTDP-001-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
1.539	0.0624	0.0379	4.060	4.050	0.0195	0.8691	1726.8	4.768	85.27	85.28	0.8311	0.8310
1.353	0.0482	0.0261	3.286	3.316	0.0144	0.7462	1740.8	4.102	86.21	86.18	0.8027	0.8030
1.279	0.0431	0.0223	3.030	3.027	0.0118	0.6932	1745.4	3.717	86.52	86.47	0.7860	0.7869
1.155	0.0352	0.0165	2.610	2.558	0.0091	0.6001	1753.0	3.260	86.72	86.76	0.7515	0.7514
1.068	0.0300	0.0122	2.197	2.234	0.0070	0.5291	1760.4	2.854	86.80	86.77	0.7164	0.7168
0.9818	0.0254	0.0092	1.931	1.926	0.0050	0.4547	1765.2	2.428	86.47	86.47	0.6720	0.6722

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	1.107	1.651	4.496	1719.1	0.0718	0.0455	0.0224	0.9375	5.110	84.67	0.8419
125%	1.011	1.529	4.008	1727.9	0.0615	0.0371	0.0192	0.8625	4.734	85.34	0.8297
100%	0.8705	1.359	3.338	1739.9	0.0486	0.0267	0.0146	0.7500	4.123	86.16	0.8041
75%	0.6481	1.108	2.383	1757.1	0.0323	0.0141	0.0079	0.5625	3.044	86.79	0.7339
50%	0.4377	0.8961	1.631	1770.6	0.0211	0.0064	0.0034	0.3750	1.995	85.68	0.6131
25%	0.2365	0.7191	1.082	1780.5	0.0136	0.0021	0.0010	0.1875	1.100	79.27	0.4128

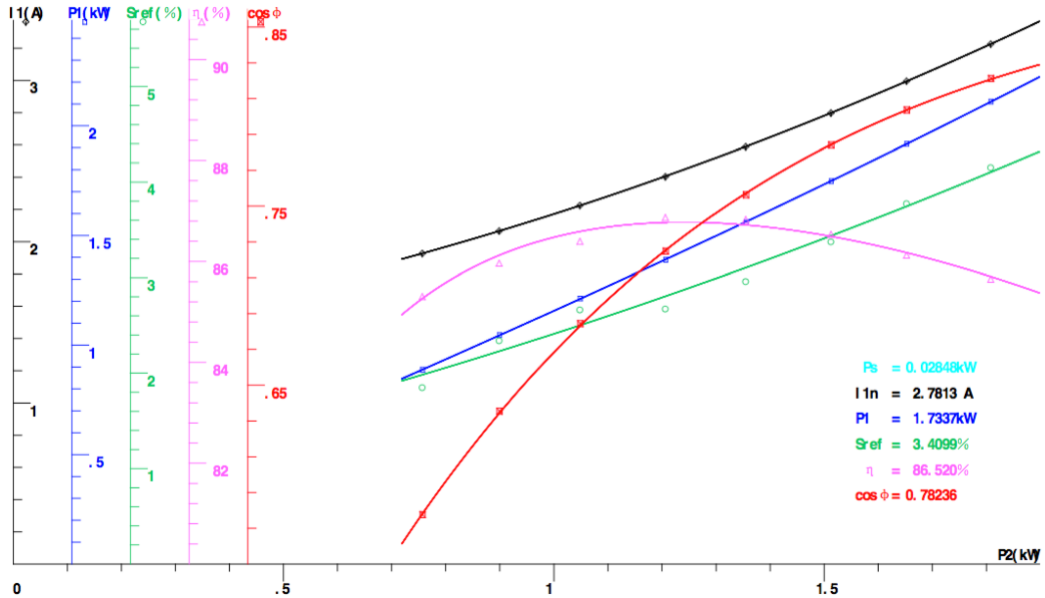
MTDP-1P5-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
2.547	0.1023	0.0601	3.962	3.963	0.0137	1.433	1728.7	7.900	86.52	86.52	0.8163	0.8162
2.388	0.0899	0.0506	3.620	3.614	0.0116	1.324	1734.8	7.279	86.91	86.91	0.8010	0.8009
2.234	0.0787	0.0417	3.268	3.272	0.0097	1.214	1741.2	6.641	87.23	87.22	0.7822	0.7823
2.086	0.0687	0.0338	2.930	2.932	0.0079	1.103	1747.3	6.013	87.43	87.43	0.7589	0.7591
1.947	0.0598	0.0270	2.609	2.607	0.0064	0.9925	1753.0	5.390	87.51	87.50	0.7309	0.7311
1.816	0.0521	0.0210	2.291	2.290	0.0050	0.8816	1758.8	4.783	87.41	87.41	0.6966	0.6969
1.697	0.0454	0.0160	1.991	1.989	0.0038	0.7728	1764.2	4.177	87.10	87.10	0.6560	0.6561
1.584	0.0396	0.0115	1.685	1.686	0.0028	0.6600	1769.7	3.550	86.46	86.45	0.6048	0.6050

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	1.585	2.461	3.777	1732.0	0.0956	0.0549	0.0126	1.375	7.566	86.73	0.8084
125%	1.453	2.304	3.428	1738.3	0.0838	0.0457	0.0105	1.265	6.933	87.08	0.7913
100%	1.258	2.082	2.924	1747.4	0.0684	0.0337	0.0079	1.100	5.997	87.43	0.7585
75%	0.9452	1.753	2.132	1761.6	0.0485	0.0183	0.0044	0.8250	4.465	87.28	0.6766
50%	0.6445	1.483	1.401	1774.8	0.0347	0.0080	0.0019	0.5500	2.941	85.34	0.5454
25%	0.3541	1.279	0.7311	1786.8	0.0258	0.0021	0.0004	0.2750	1.399	77.67	0.3474

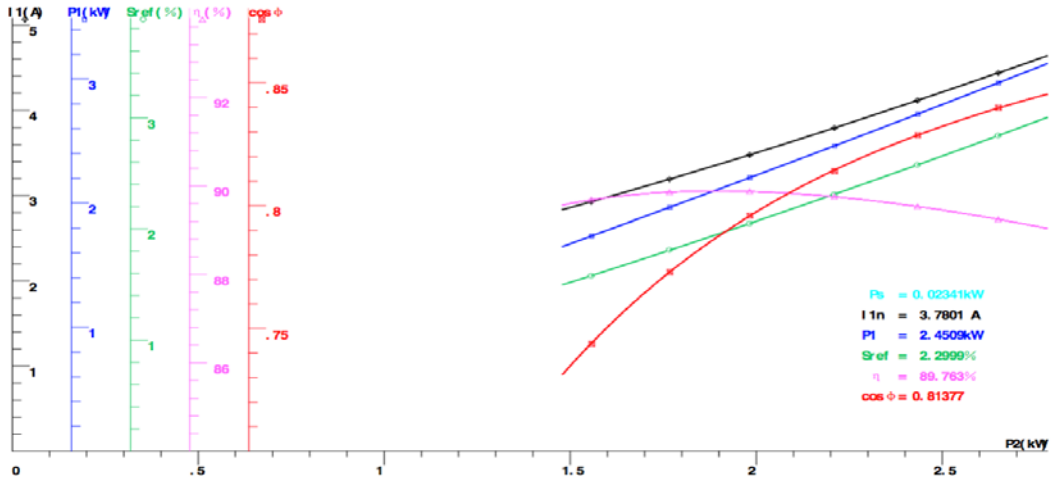
MTDP-002-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
3.226	0.1186	0.0805	4.150	4.104	0.0420	1.808	1725.2	9.946	85.65	85.70	0.8212	0.8207
2.994	0.1023	0.0665	3.772	3.745	0.0349	1.652	1732.0	9.070	86.12	86.17	0.8036	0.8036
2.798	0.0892	0.0541	3.372	3.437	0.0289	1.513	1739.2	8.260	86.53	86.50	0.7840	0.7843
2.589	0.0764	0.0422	2.958	3.103	0.0231	1.355	1746.7	7.380	86.83	86.72	0.7563	0.7571
2.406	0.0659	0.0338	2.671	2.804	0.0183	1.206	1751.8	6.569	86.87	86.77	0.7248	0.7252
2.224	0.0564	0.0293	2.662	2.500	0.0137	1.048	1752.0	5.692	86.40	86.59	0.6844	0.6830
2.066	0.0486	0.0220	2.339	2.229	0.0101	0.8992	1757.8	4.875	85.96	86.12	0.6354	0.6343
1.927	0.0423	0.0145	1.848	1.983	0.0069	0.7567	1766.7	4.036	85.31	85.26	0.5776	0.5780

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	2.194	3.330	4.263	1723.3	0.1263	0.0859	0.0454	1.875	10.35	86.46	0.8270
125%	2.007	3.101	3.911	1729.6	0.1096	0.0721	0.0380	1.725	9.471	85.97	0.8121
100%	1.734	2.781	3.410	1738.6	0.0881	0.0543	0.0285	1.500	8.195	86.52	0.7824
75%	1.297	2.311	2.646	1752.4	0.0608	0.0312	0.0159	1.125	6.122	86.71	0.7047
50%	0.8802	1.921	1.971	1764.5	0.0421	0.0154	0.0068	0.7500	4.005	85.21	0.5751
25%	0.4788	1.615	1.386	1775.1	0.0297	0.0054	0.0012	0.3750	1.713	78.32	0.3722

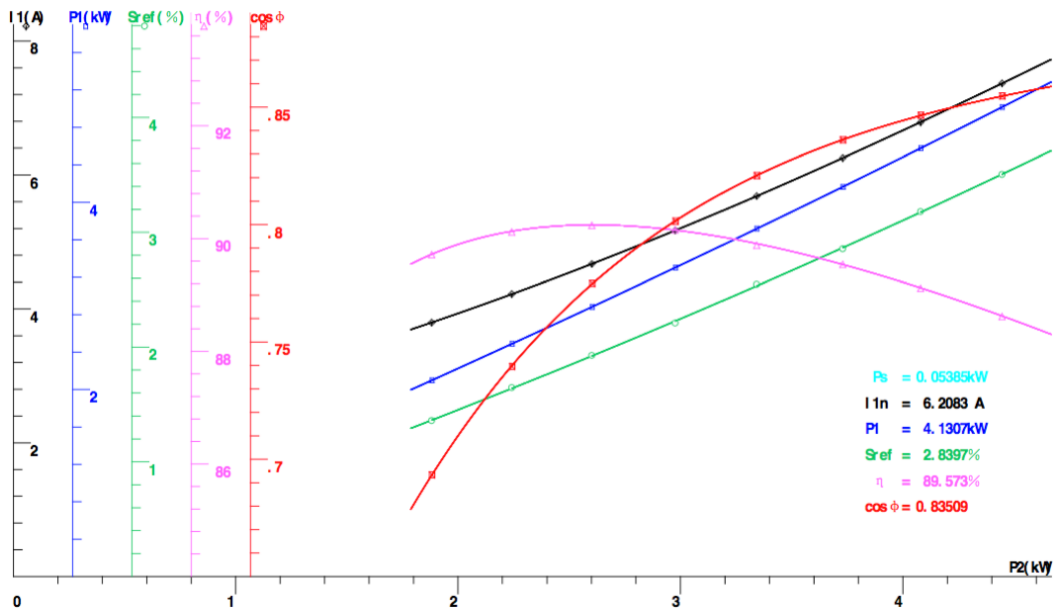
MTDP-003-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
4.439	0.1164	0.0792	2.840	2.839	0.0344	2.650	1748.9	14.41	89.25	89.25	0.8398	0.8397
4.116	0.1001	0.0657	2.576	2.576	0.0289	2.433	1753.6	13.20	89.54	89.54	0.8287	0.8287
3.794	0.0850	0.0534	2.309	2.311	0.0236	2.210	1758.4	11.94	89.76	89.76	0.8140	0.8145
3.478	0.0715	0.0424	2.050	2.049	0.0189	1.982	1763.1	10.68	89.88	89.88	0.7959	0.7958
3.193	0.0602	0.0333	1.811	1.809	0.0149	1.767	1767.4	9.500	89.86	89.86	0.7730	0.7729
2.929	0.0507	0.0256	1.579	1.580	0.0115	1.557	1771.6	8.342	89.69	89.69	0.7438	0.7440

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	3.086	4.590	2.962	1746.7	0.1244	0.0858	0.0371	2.750	14.97	89.10	0.8440
125%	2.829	4.259	2.692	1751.5	0.1072	0.0715	0.0312	2.530	13.73	89.42	0.8339
100%	2.451	3.780	2.300	1758.6	0.0844	0.0529	0.0234	2.200	11.89	89.76	0.8138
75%	1.838	3.044	1.681	1769.7	0.0547	0.0289	0.0130	1.650	8.853	89.79	0.7577
50%	1.245	2.408	1.105	1780.1	0.0343	0.0126	0.0057	1.100	5.864	88.38	0.6487
25%	0.6691	1.900	0.5730	1789.7	0.0213	0.0033	0.0014	0.5500	2.931	82.20	0.4420

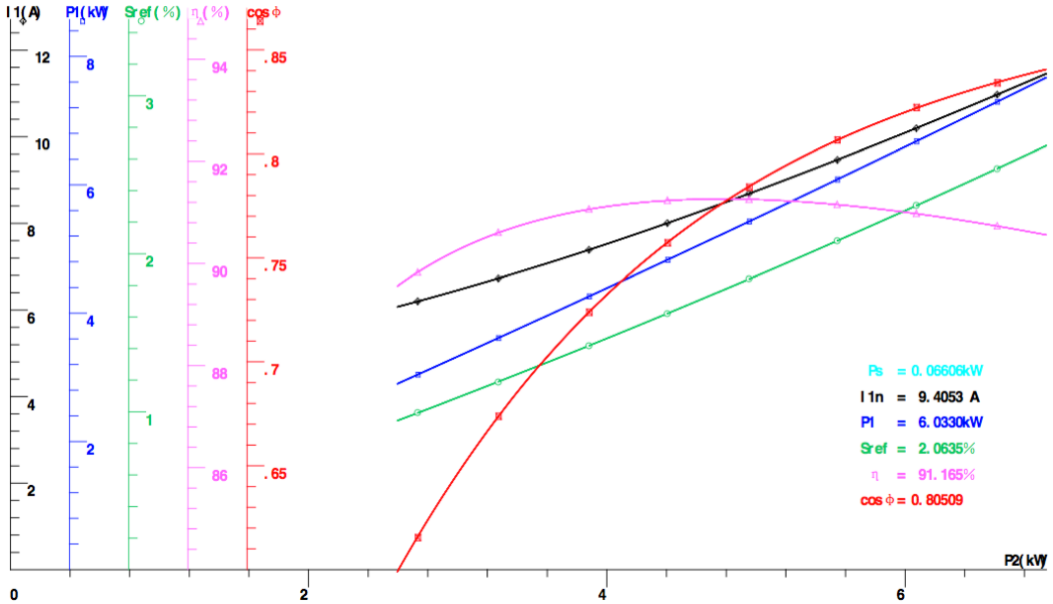
MTDP-005-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
7.366	0.2103	0.1653	3.504	3.506	0.0790	4.446	1736.8	24.39	88.62	88.63	0.8548	0.8547
6.787	0.1784	0.1370	3.180	3.174	0.0658	4.079	1742.7	22.26	89.12	89.13	0.8465	0.8464
6.252	0.1515	0.1121	2.857	2.865	0.0546	3.729	1748.5	20.28	89.54	89.54	0.8360	0.8361
5.683	0.1253	0.0892	2.547	2.532	0.0438	3.342	1754.1	18.15	89.88	89.91	0.8209	0.8209
5.171	0.1036	0.0686	2.209	2.228	0.0344	2.977	1760.1	16.08	90.16	90.15	0.8014	0.8015
4.672	0.0845	0.0522	1.928	1.923	0.0258	2.602	1765.2	13.94	90.23	90.24	0.7749	0.7746
4.221	0.0691	0.0383	1.647	1.640	0.0190	2.243	1770.3	11.97	90.12	90.13	0.7396	0.7399
3.798	0.0559	0.0265	1.360	1.364	0.0133	1.882	1775.4	10.01	89.71	89.72	0.6933	0.6932

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	5.234	7.656	3.671	1733.9	0.2272	0.1806	0.0857	4.625	25.39	88.37	0.8580
125%	4.786	7.063	3.332	1740.0	0.1933	0.1501	0.0720	4.255	23.28	88.90	0.8506
100%	4.131	6.208	2.840	1748.9	0.1494	0.1105	0.0538	3.700	20.13	89.57	0.8351
75%	3.076	4.899	2.063	1762.9	0.0930	0.0596	0.0296	2.775	14.93	90.22	0.7880
50%	2.063	3.762	1.340	1775.9	0.0549	0.0257	0.0128	1.850	9.822	89.67	0.6884
25%	1.087	2.833	0.6711	1787.9	0.0311	0.0065	0.0031	0.9250	4.824	85.10	0.4815

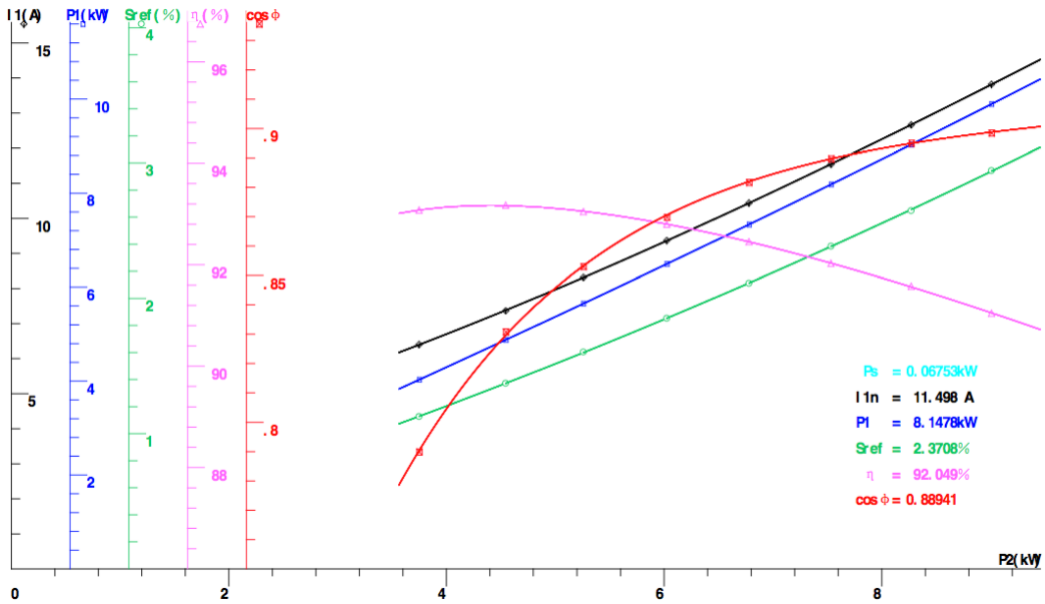
MTDP-7P5-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
10.97	0.2150	0.1755	2.537	2.539	0.0965	6.617	1754.3	35.94	90.74	90.73	0.8341	0.8343
10.20	0.1854	0.1460	2.307	2.305	0.0810	6.074	1758.5	32.92	90.98	90.98	0.8222	0.8219
9.465	0.1600	0.1200	2.083	2.082	0.0670	5.545	1762.5	29.95	91.16	91.15	0.8066	0.8066
8.686	0.1348	0.0945	1.841	1.840	0.0533	4.953	1766.9	26.71	91.26	91.26	0.7839	0.7843
8.005	0.1144	0.0738	1.622	1.622	0.0418	4.407	1770.8	23.66	91.24	91.23	0.7572	0.7573
7.389	0.0975	0.0567	1.418	1.419	0.0323	3.881	1774.5	20.78	91.07	91.06	0.7238	0.7239
6.731	0.0808	0.0400	1.188	1.190	0.0228	3.274	1778.6	17.46	90.61	90.60	0.6739	0.6737
6.199	0.0686	0.0279	0.9951	0.9931	0.0161	2.732	1782.1	14.68	89.83	89.83	0.6154	0.6159

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	7.588	11.35	2.652	1752.3	0.2299	0.1909	0.1042	6.875	37.34	90.60	0.8393
125%	6.960	10.55	2.412	1756.6	0.1988	0.1592	0.0880	6.325	34.32	90.87	0.8280
100%	6.033	9.405	2.063	1762.9	0.1579	0.1179	0.0661	5.500	29.73	91.17	0.8051
75%	4.525	7.670	1.513	1772.8	0.1050	0.0644	0.0365	4.125	22.10	91.16	0.7405
50%	3.060	6.215	0.9995	1782.0	0.0690	0.0282	0.0163	2.750	14.75	89.86	0.6180
25%	1.634	5.116	0.5239	1790.6	0.0467	0.0074	0.0048	1.375	7.976	84.17	0.4008

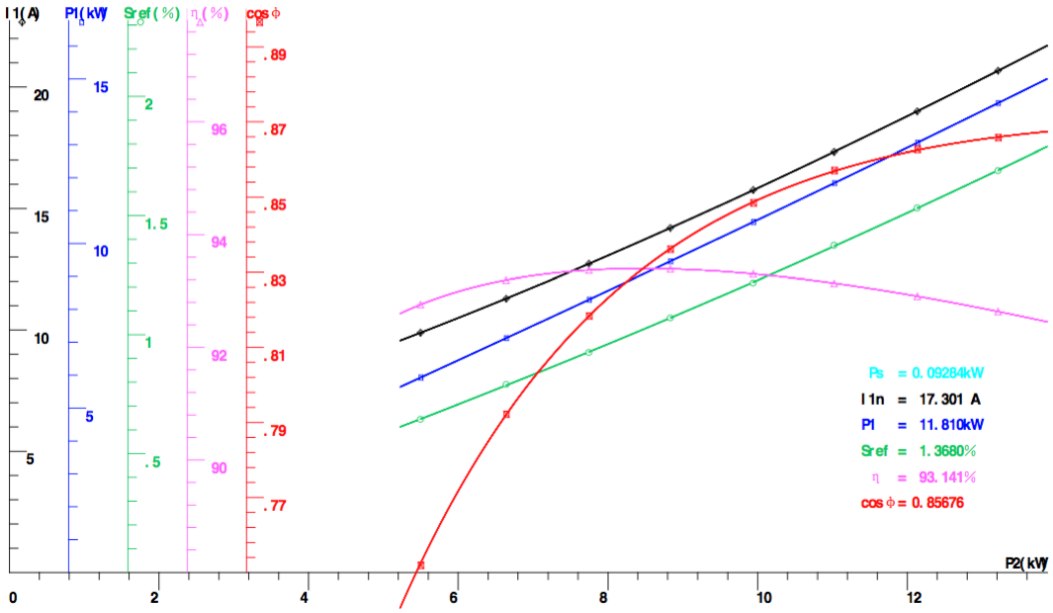
MTDP-010-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
13.82	0.3752	0.2770	2.944	2.938	0.0988	9.008	1747.0	49.18	91.05	91.05	0.8984	0.8988
12.67	0.3150	0.2278	2.647	2.656	0.0824	8.270	1752.3	44.91	91.58	91.56	0.8950	0.8949
11.55	0.2619	0.1863	2.385	2.383	0.0683	7.533	1757.1	40.90	92.03	92.03	0.8897	0.8897
10.43	0.2140	0.1480	2.112	2.113	0.0549	6.779	1762.0	36.65	92.45	92.45	0.8817	0.8820
9.360	0.1724	0.1150	1.853	1.853	0.0431	6.024	1766.6	32.48	92.80	92.80	0.8698	0.8705
8.311	0.1359	0.0867	1.604	1.599	0.0327	5.257	1771.1	28.28	93.05	93.05	0.8530	0.8532
7.381	0.1066	0.0639	1.372	1.372	0.0242	4.545	1775.3	24.36	93.17	93.17	0.8307	0.8296
6.397	0.0806	0.0432	1.127	1.129	0.0165	3.749	1779.7	20.08	93.08	93.08	0.7899	0.7904

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	10.33	14.40	3.083	1744.5	0.4072	0.3024	0.1072	9.375	51.24	90.78	0.9004
125%	9.444	13.22	2.791	1749.8	0.3432	0.2509	0.0902	8.625	46.99	91.32	0.8969
100%	8.148	11.50	2.371	1757.3	0.2598	0.1844	0.0675	7.500	40.66	92.05	0.8894
75%	6.052	8.808	1.720	1769.0	0.1524	0.0995	0.0375	5.625	30.29	92.95	0.8624
50%	4.029	6.398	1.129	1779.7	0.0804	0.0433	0.0165	3.750	20.07	93.08	0.7904
25%	2.068	4.340	0.5989	1789.2	0.0370	0.0115	0.0041	1.875	9.979	90.68	0.5979

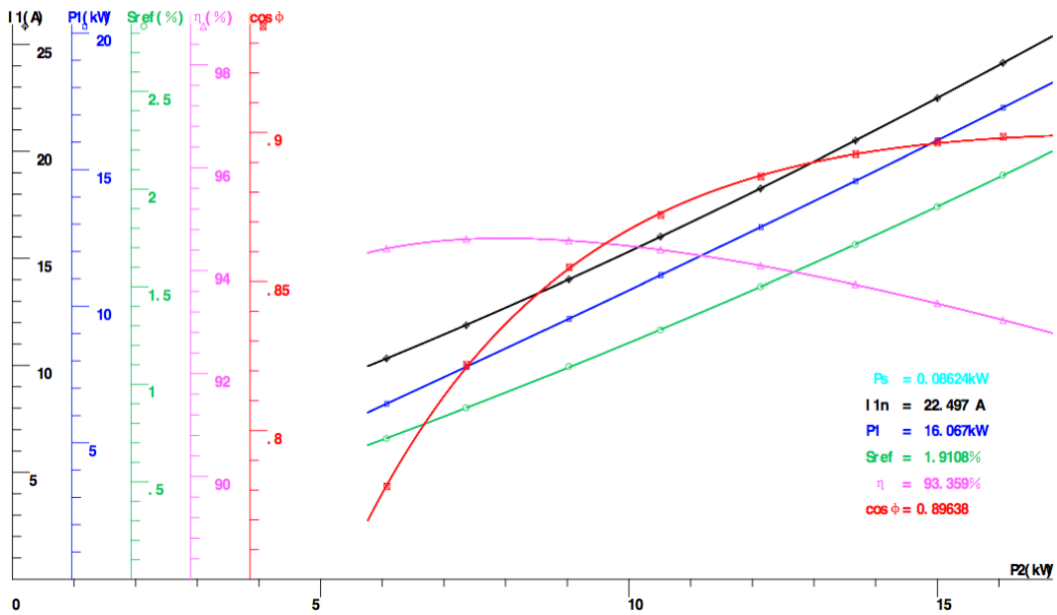
MTDP-015-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
20.67	0.4118	0.2310	1.689	1.690	0.1347	13.21	1769.5	71.19	92.64	92.64	0.8658	0.8660
19.00	0.3477	0.1920	1.532	1.531	0.1135	12.13	1772.3	65.36	92.91	92.91	0.8627	0.8625
17.33	0.2894	0.1563	1.375	1.371	0.0933	11.02	1775.2	59.26	93.13	93.14	0.8571	0.8569
15.76	0.2393	0.1246	1.217	1.220	0.0754	9.941	1778.0	53.25	93.30	93.30	0.8485	0.8487
14.20	0.1942	0.0973	1.071	1.070	0.0591	8.835	1780.6	47.16	93.39	93.39	0.8361	0.8362
12.73	0.1560	0.0737	0.9250	0.9274	0.0454	7.747	1783.3	41.31	93.37	93.37	0.8184	0.8183
11.29	0.1228	0.0540	0.7905	0.7867	0.0333	6.643	1785.7	35.40	93.19	93.19	0.7922	0.7921
9.887	0.0942	0.0364	0.6444	0.6457	0.0228	5.498	1788.3	29.27	92.76	92.76	0.7519	0.7525

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	14.87	21.52	1.771	1768.1	0.4460	0.2524	0.1460	13.75	74.12	92.49	0.8672
125%	13.63	19.80	1.607	1771.1	0.3776	0.2102	0.1234	12.65	68.15	92.78	0.8643
100%	11.81	17.30	1.368	1775.4	0.2883	0.1552	0.0928	11.00	59.10	93.14	0.8568
75%	8.833	13.40	0.9929	1782.1	0.1729	0.0842	0.0515	8.250	44.02	93.40	0.8274
50%	5.929	9.889	0.6459	1788.4	0.0942	0.0366	0.0228	5.500	29.31	92.76	0.7526
25%	3.088	6.848	0.3271	1794.1	0.0452	0.0094	0.0063	2.750	15.40	89.07	0.5659

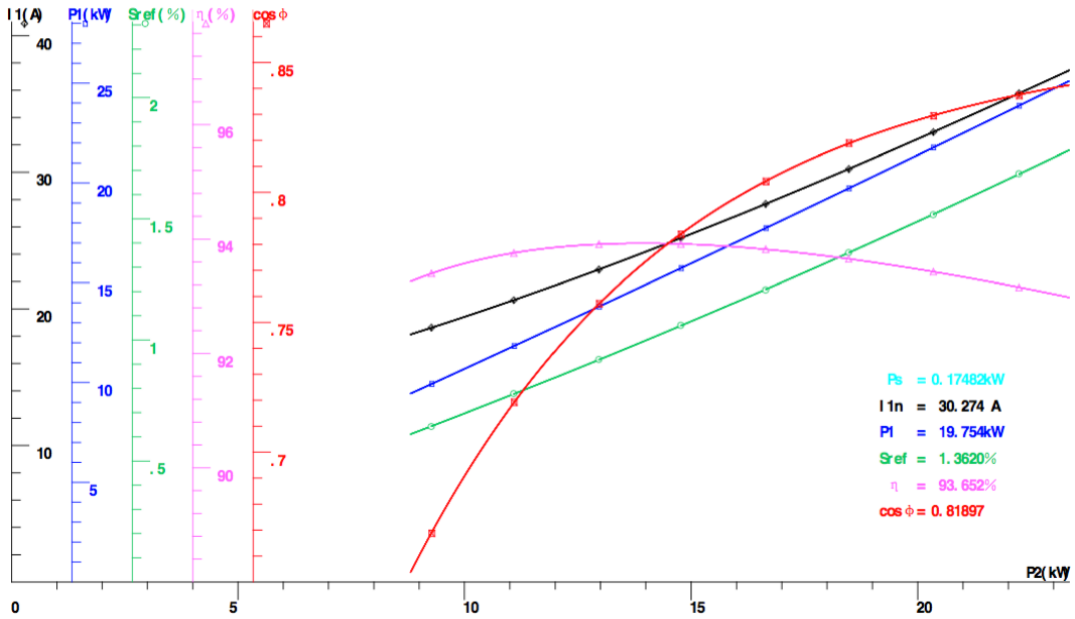
MTDP-020-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
24.13	0.5684	0.3432	2.072	2.070	0.0992	16.06	1762.7	86.89	93.04	93.04	0.8986	0.8981
22.50	0.4932	0.2949	1.910	1.911	0.0862	15.00	1765.6	81.02	93.37	93.36	0.8966	0.8964
20.51	0.4101	0.2409	1.715	1.717	0.0714	13.67	1769.1	73.71	93.73	93.73	0.8927	0.8927
18.27	0.3260	0.1865	1.500	1.500	0.0560	12.13	1773.0	65.28	94.10	94.10	0.8853	0.8856
16.01	0.2504	0.1374	1.278	1.280	0.0417	10.51	1777.0	56.31	94.41	94.40	0.8723	0.8729
14.02	0.1916	0.1005	1.090	1.086	0.0308	9.025	1780.4	48.39	94.58	94.58	0.8547	0.8543
11.90	0.1378	0.0661	0.8796	0.8790	0.0203	7.364	1784.2	39.34	94.61	94.61	0.8221	0.8211
10.32	0.1041	0.0447	0.7222	0.7238	0.0138	6.069	1787.0	32.37	94.43	94.43	0.7812	0.7814

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	20.35	28.39	2.490	1755.2	0.7862	0.4839	0.1362	18.75	101.8	92.16	0.8996
125%	18.62	25.99	2.253	1759.4	0.6588	0.4016	0.1148	17.25	93.48	92.66	0.8991
100%	16.07	22.50	1.911	1765.6	0.4938	0.2951	0.0862	15.00	81.02	93.36	0.8964
75%	11.93	17.03	1.379	1775.2	0.2829	0.1588	0.0480	11.25	60.43	94.28	0.8795
50%	7.927	12.07	0.8957	1783.9	0.1421	0.0685	0.0211	7.500	40.08	94.62	0.8245
25%	4.027	7.690	0.4603	1791.7	0.0577	0.0176	0.0052	3.750	19.99	93.12	0.6573

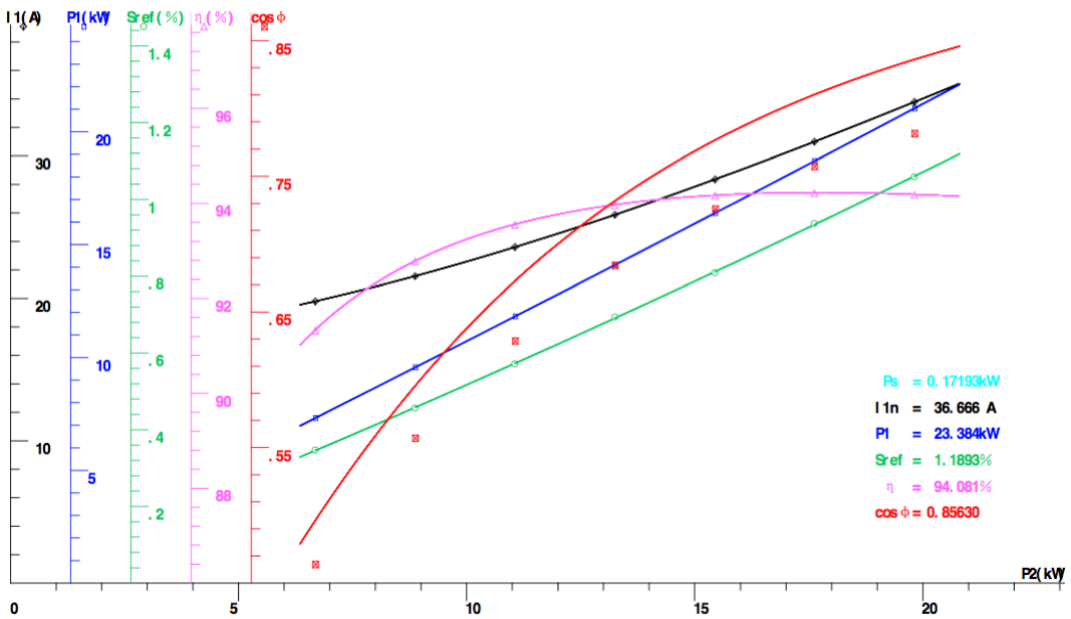
MTDP-025-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
35.77	0.6184	0.3872	1.686	1.684	0.2537	22.23	1769.6	119.9	93.16	93.16	0.8373	0.8376
32.94	0.5242	0.3180	1.517	1.519	0.2121	20.34	1772.6	109.7	93.43	93.43	0.8294	0.8296
30.24	0.4421	0.2586	1.361	1.360	0.1743	18.48	1775.5	99.43	93.65	93.66	0.8189	0.8188
27.68	0.3705	0.2061	1.206	1.209	0.1409	16.64	1778.2	89.40	93.82	93.82	0.8042	0.8043
25.18	0.3066	0.1606	1.061	1.059	0.1108	14.77	1780.8	79.28	93.91	93.92	0.7839	0.7840
22.89	0.2531	0.1219	0.9189	0.9181	0.0850	12.97	1783.4	69.42	93.91	93.91	0.7571	0.7571
20.65	0.2060	0.0882	0.7781	0.7768	0.0620	11.09	1785.9	59.32	93.76	93.76	0.7192	0.7190
18.63	0.1677	0.0609	0.6426	0.6441	0.0431	9.272	1788.3	49.46	93.40	93.40	0.6688	0.6690

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	24.86	37.12	1.764	1768.3	0.6660	0.4218	0.2747	23.13	124.8	93.02	0.8406
125%	22.80	34.32	1.600	1771.2	0.5694	0.3512	0.2321	21.27	114.7	93.30	0.8338
100%	19.75	30.27	1.362	1775.5	0.4430	0.2592	0.1748	18.50	99.57	93.65	0.8190
75%	14.77	24.03	0.9883	1782.2	0.2790	0.1404	0.0975	13.88	74.37	93.93	0.7717
50%	9.904	18.60	0.6425	1788.4	0.1672	0.0607	0.0430	9.250	49.36	93.39	0.6683
25%	5.136	14.22	0.3246	1794.2	0.0977	0.0154	0.0107	4.625	24.67	90.06	0.4534

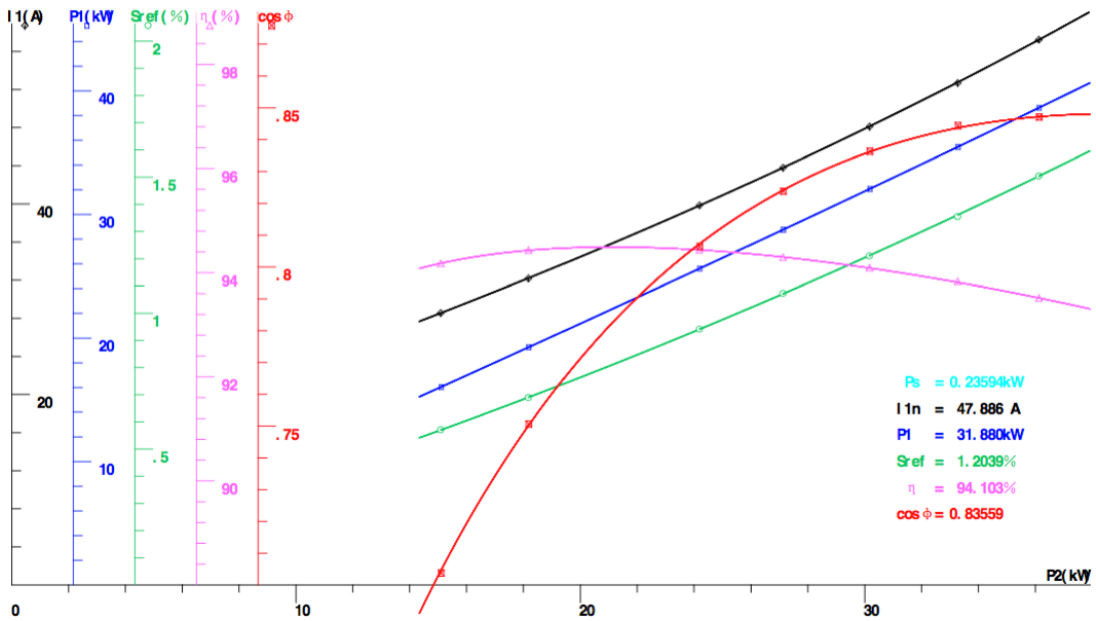
MTDP-030-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
33.78	0.4290	0.2148	1.059	1.060	0.1384	19.81	1780.8	106.1	94.18	94.19	0.7814	0.8360
30.99	0.3610	0.1687	0.9369	0.9341	0.1088	17.62	1783.0	94.06	94.21	94.23	0.7572	0.8101
28.36	0.3024	0.1276	0.8089	0.8117	0.0833	15.45	1785.3	82.28	94.16	94.17	0.7259	0.7766
25.87	0.2515	0.0938	0.6937	0.6906	0.0611	13.25	1787.4	70.48	93.96	93.97	0.6841	0.7317
23.60	0.2095	0.0645	0.5716	0.5729	0.0424	11.06	1789.6	58.74	93.55	93.56	0.6286	0.6727
21.56	0.1746	0.0413	0.4560	0.4578	0.0271	8.872	1791.7	46.90	92.78	92.79	0.5569	0.5954
19.80	0.1475	0.0237	0.3469	0.3456	0.0152	6.683	1793.7	35.17	91.32	91.33	0.4637	0.4961

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	29.38	44.13	1.525	1772.5	0.7321	0.4320	0.2758	27.50	149.7	93.62	0.8938
125%	26.96	41.13	1.389	1775.0	0.6360	0.3612	0.2306	25.30	136.9	93.83	0.8802
100%	23.38	36.67	1.189	1778.6	0.5054	0.2682	0.1719	22.00	118.2	94.08	0.8563
75%	17.51	29.62	0.8707	1784.3	0.3298	0.1468	0.0952	16.50	87.99	94.22	0.7939
50%	11.76	23.54	0.5696	1789.7	0.2083	0.0639	0.0419	11.00	58.38	93.54	0.6708
25%	6.110	18.98	0.2861	1794.9	0.1354	0.0161	0.0102	5.500	28.74	90.01	0.4323

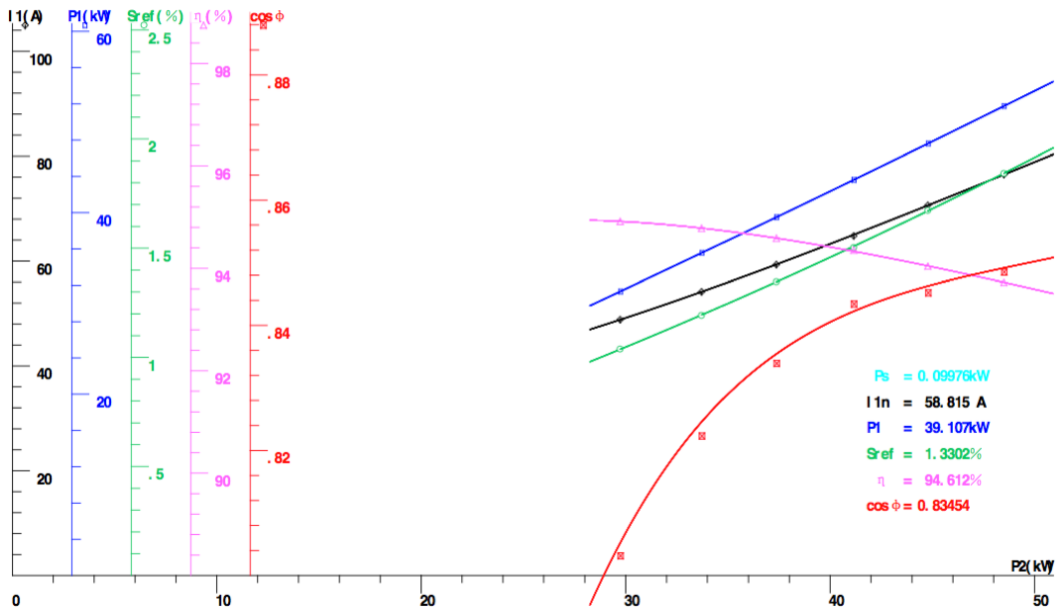
MTDP-040-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
57.23	1.102	0.5598	1.504	1.504	0.3451	36.12	1772.9	193.8	93.52	93.52	0.8471	0.8472
52.75	0.9335	0.4633	1.354	1.361	0.2897	33.27	1775.5	177.6	93.83	93.82	0.8444	0.8437
48.13	0.7782	0.3748	1.210	1.212	0.2383	30.17	1778.1	161.1	94.10	94.09	0.8363	0.8361
43.80	0.6456	0.2982	1.073	1.071	0.1928	27.12	1780.6	144.9	94.30	94.30	0.8238	0.8241
39.83	0.5346	0.2330	0.9410	0.9408	0.1522	24.19	1783.0	128.7	94.44	94.44	0.8064	0.8072
32.22	0.3483	0.1281	0.6895	0.6904	0.0855	18.18	1787.5	96.48	94.43	94.43	0.7506	0.7501
28.56	0.2747	0.0881	0.5708	0.5704	0.0585	15.10	1789.7	79.81	94.18	94.18	0.7037	0.7045

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	40.17	59.46	1.574	1771.7	1.189	0.6087	0.3727	37.50	201.4	93.36	0.8479
125%	36.82	54.66	1.422	1774.4	1.005	0.5049	0.3139	34.50	184.9	93.69	0.8456
100%	31.88	47.89	1.204	1778.3	0.7713	0.3707	0.2359	30.00	160.3	94.10	0.8356
75%	23.81	37.62	0.8681	1784.4	0.4760	0.1998	0.1316	22.50	119.7	94.48	0.7945
50%	15.93	28.45	0.5667	1789.8	0.2722	0.0869	0.0577	15.00	79.29	94.17	0.7028
25%	8.191	20.16	0.2998	1794.6	0.1367	0.0232	0.0136	7.500	38.51	91.57	0.5099

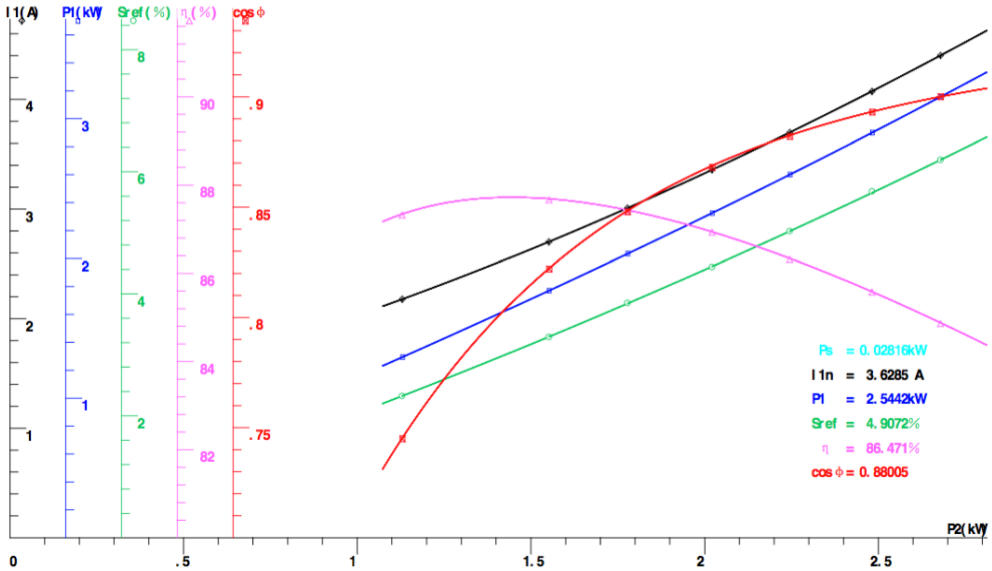
MTDP-050-3BD18



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
76.48	1.607	0.9166	1.842	1.843	0.1743	48.50	1766.7	260.4	93.73	93.73	0.8485	0.8492
70.62	1.370	0.7670	1.673	1.671	0.1483	44.78	1769.8	240.2	94.04	94.05	0.8452	0.8463
65.01	1.153	0.6521	1.502	1.509	0.1233	41.15	1772.9	219.0	94.35	94.33	0.8434	0.8422
59.35	0.9671	0.5135	1.346	1.346	0.1018	37.36	1775.7	199.0	94.59	94.59	0.8339	0.8354
54.15	0.8059	0.4099	1.192	1.195	0.0824	33.72	1778.4	179.0	94.78	94.78	0.8223	0.8246
48.83	0.6549	0.3143	1.038	1.037	0.0641	29.73	1781.2	157.9	94.91	94.92	0.8031	0.8052

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	49.24	72.93	1.738	1768.7	1.461	0.8239	0.1584	46.25	248.3	93.92	0.8475
125%	45.16	67.15	1.570	1771.7	1.239	0.6836	0.1335	42.55	227.9	94.23	0.8440
100%	39.11	58.81	1.330	1776.1	0.9503	0.5024	0.0998	37.00	197.0	94.61	0.8345
75%	29.23	46.35	0.9609	1782.7	0.5901	0.2714	0.0562	27.75	147.8	94.94	0.7915
50%	19.58	36.60	0.6305	1788.7	0.3680	0.1186	0.0292	18.50	106.5	94.47	0.6715
25%	10.13	30.65	0.3390	1793.9	0.2580	0.0321	0.0160	9.250	78.89	91.32	0.4148

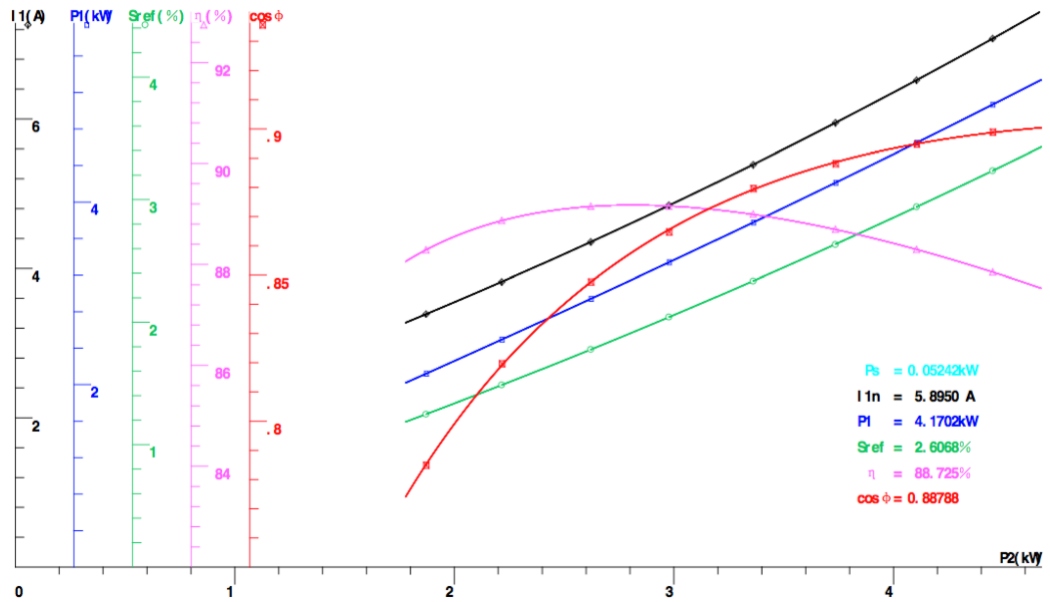
MTDP-003-3BD36



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
4.401	0.1697	0.1817	6.194	6.194	0.0431	2.679	3376.8	7.503	84.86	84.88	0.9001	0.9000
4.074	0.1454	0.1533	5.678	5.654	0.0356	2.482	3395.4	6.822	85.57	85.58	0.8930	0.8932
3.698	0.1198	0.1220	5.026	5.025	0.0296	2.245	3418.9	6.217	86.31	86.34	0.8820	0.8825
3.359	0.0988	0.0964	4.439	4.448	0.0233	2.021	3440.0	5.516	86.93	86.94	0.8680	0.8688
3.009	0.0794	0.0731	3.851	3.842	0.0178	1.778	3461.2	4.816	87.40	87.43	0.8478	0.8484
2.702	0.0639	0.0543	3.293	3.296	0.0133	1.552	3481.3	4.176	87.67	87.69	0.8219	0.8222
2.178	0.0416	0.0278	2.326	2.326	0.0067	1.130	3516.1	2.968	87.32	87.34	0.7449	0.7452

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	3.250	4.522	6.392	3369.9	0.1791	0.1929	0.0456	2.750	7.721	84.61	0.9021
125%	2.962	4.154	5.785	3391.7	0.1511	0.1595	0.0381	2.530	7.056	85.42	0.8950
100%	2.544	3.628	4.907	3423.3	0.1153	0.1165	0.0282	2.200	6.065	86.47	0.8801
75%	1.883	2.833	3.530	3472.9	0.0703	0.0620	0.0151	1.650	4.448	87.61	0.8345
50%	1.261	2.144	2.261	3518.6	0.0403	0.0263	0.0064	1.100	2.888	87.25	0.7380
25%	0.6691	1.574	1.099	3560.5	0.0217	0.0065	0.0015	0.5500	1.408	82.20	0.5337

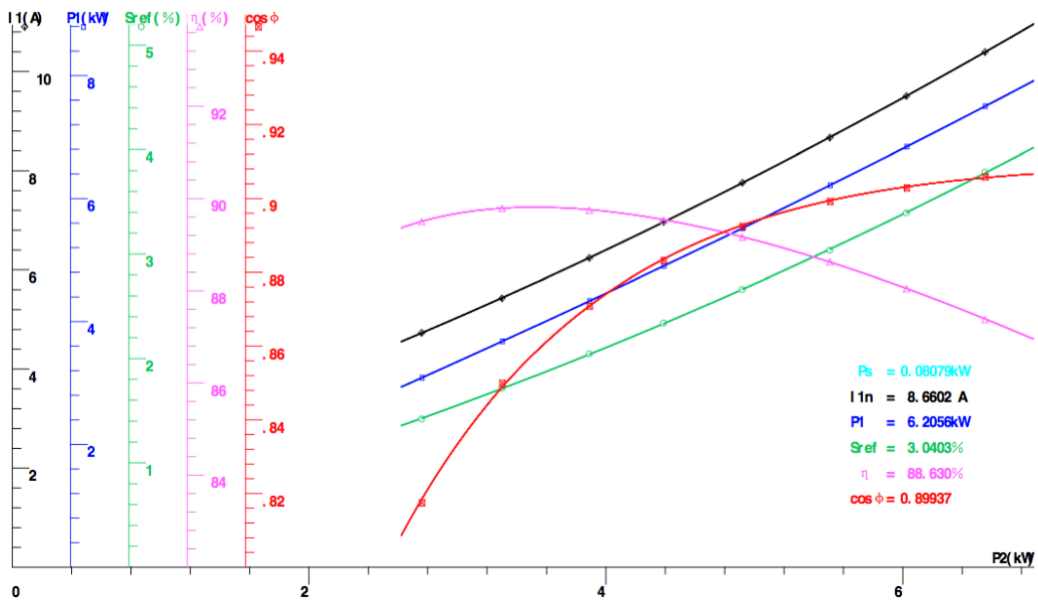
MTDP-005-3BD36



I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
7.077	0.2302	0.1544	3.236	3.236	0.0770	4.452	3483.5	12.12	87.85	87.85	0.8989	0.8987
6.521	0.1953	0.1290	2.941	2.941	0.0650	4.105	3494.1	11.14	88.30	88.30	0.8947	0.8949
5.949	0.1626	0.1048	2.634	2.636	0.0535	3.735	3505.2	10.10	88.70	88.69	0.8881	0.8886
5.391	0.1334	0.0835	2.335	2.336	0.0429	3.361	3515.9	9.050	89.00	88.99	0.8796	0.8793
4.843	0.1080	0.0646	2.043	2.041	0.0336	2.978	3526.5	8.003	89.15	89.16	0.8647	0.8655
4.354	0.0871	0.0495	1.777	1.777	0.0258	2.621	3536.0	7.012	89.15	89.15	0.8476	0.8476
3.822	0.0670	0.0350	1.487	1.487	0.0182	2.216	3546.5	5.899	88.87	88.87	0.8197	0.8190
3.389	0.0528	0.0249	1.249	1.249	0.0128	1.872	3555.0	4.951	88.29	88.29	0.7849	0.7852

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	5.280	7.362	3.386	3478.1	0.2491	0.1681	0.0834	4.625	12.62	87.60	0.9001
125%	4.829	6.759	3.067	3489.6	0.2099	0.1396	0.0701	4.255	11.56	88.11	0.8968
100%	4.170	5.895	2.607	3506.2	0.1597	0.1028	0.0524	3.700	10.00	88.72	0.8879
75%	3.112	4.563	1.890	3532.0	0.0957	0.0557	0.0290	2.775	7.437	89.17	0.8560
50%	2.097	3.362	1.235	3555.5	0.0519	0.0244	0.0125	1.850	4.891	88.24	0.7827
25%	1.117	2.291	0.6424	3576.9	0.0241	0.0066	0.0028	0.9250	2.327	82.77	0.6121

MTDP-7P5-3BD36

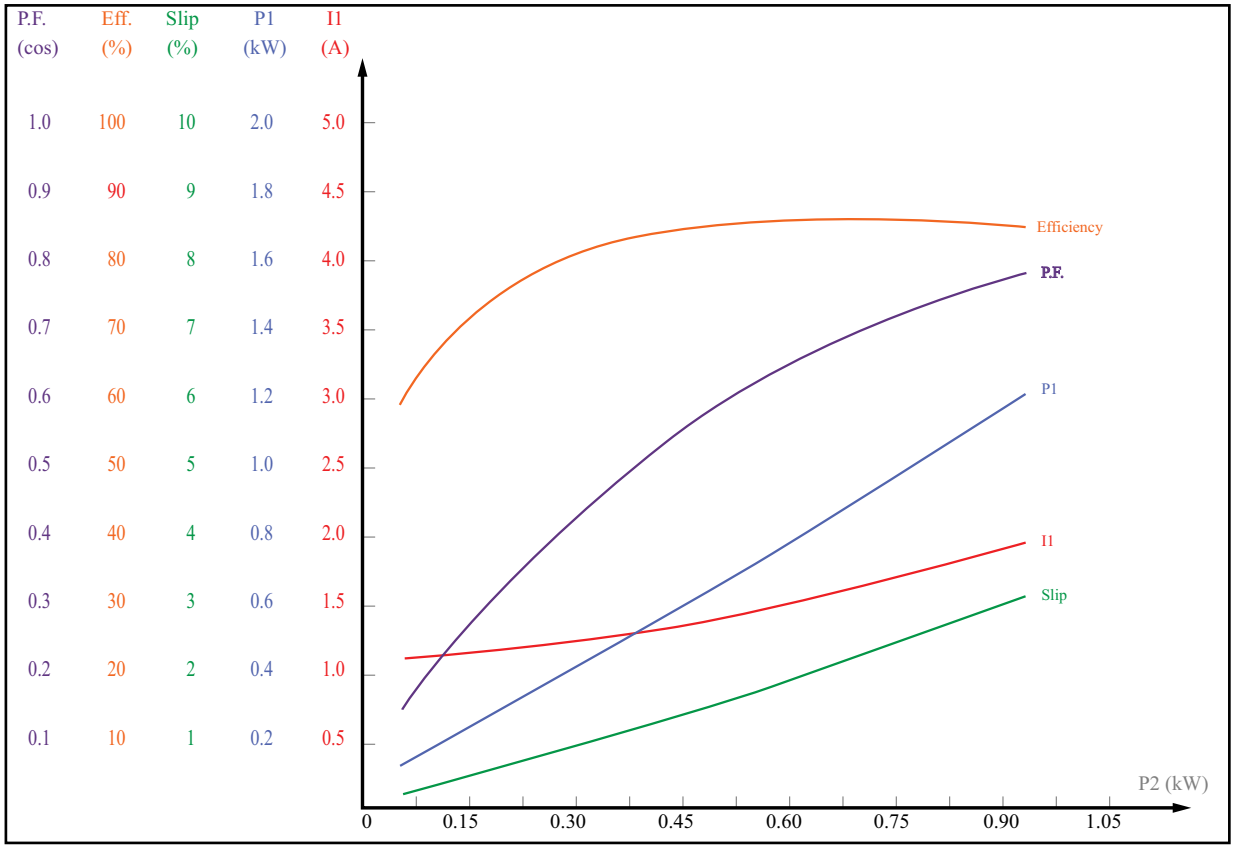


I 1j (A)	Pcu1s(kW)	Pcu2s(kW)	Sref (%)	Srefj (%)	Ps (kW)	P2 (kW)	nref(r/min)	Tref(N.m.)	η (%)	η j (%)	cos Φ	cosj Φ
10.39	0.3850	0.2662	3.784	3.776	0.1169	6.554	3463.8	18.10	87.38	87.39	0.9059	0.9056
9.508	0.3220	0.2184	3.393	3.398	0.0978	6.024	3477.9	16.56	88.05	88.05	0.9029	0.9032
8.675	0.2677	0.1781	3.036	3.046	0.0810	5.509	3490.7	15.07	88.63	88.62	0.8992	0.8994
7.756	0.2145	0.1389	2.661	2.662	0.0641	4.919	3504.2	13.40	89.16	89.17	0.8924	0.8928
6.964	0.1730	0.1087	2.340	2.334	0.0506	4.389	3515.8	11.91	89.52	89.54	0.8832	0.8836
6.244	0.1389	0.0840	2.045	2.039	0.0395	3.889	3526.4	10.52	89.74	89.76	0.8708	0.8709
5.437	0.1051	0.0598	1.715	1.712	0.0281	3.301	3538.2	8.874	89.79	89.79	0.8499	0.8488
4.729	0.0798	0.0415	1.422	1.428	0.0195	2.760	3548.8	7.391	89.49	89.50	0.8174	0.8184

Rated Power	P1 (kW)	I 1 (A)	Sref (%)	n (speed)	Pcu1(kW)	Pcu2(kW)	Ps(kW)	P2 (kW)	T (N.m.)	η (%)	cos Φ
150%	7.906	10.94	4.013	3455.5	0.4267	0.2969	0.1294	6.875	19.05	86.96	0.9067
125%	7.213	10.01	3.611	3470.0	0.3568	0.2446	0.1084	6.325	17.43	87.68	0.9047
100%	6.206	8.660	3.040	3490.5	0.2672	0.1780	0.0808	5.500	15.05	88.63	0.8994
75%	4.600	6.580	2.177	3521.6	0.1542	0.0949	0.0445	4.125	11.17	89.67	0.8774
50%	3.073	4.716	1.423	3548.8	0.0793	0.0414	0.0193	2.750	7.359	89.50	0.8177
25%	1.610	3.082	0.7776	3572.0	0.0338	0.0116	0.0045	1.375	3.563	85.43	0.6554

Performance Curves for MTRP Motors

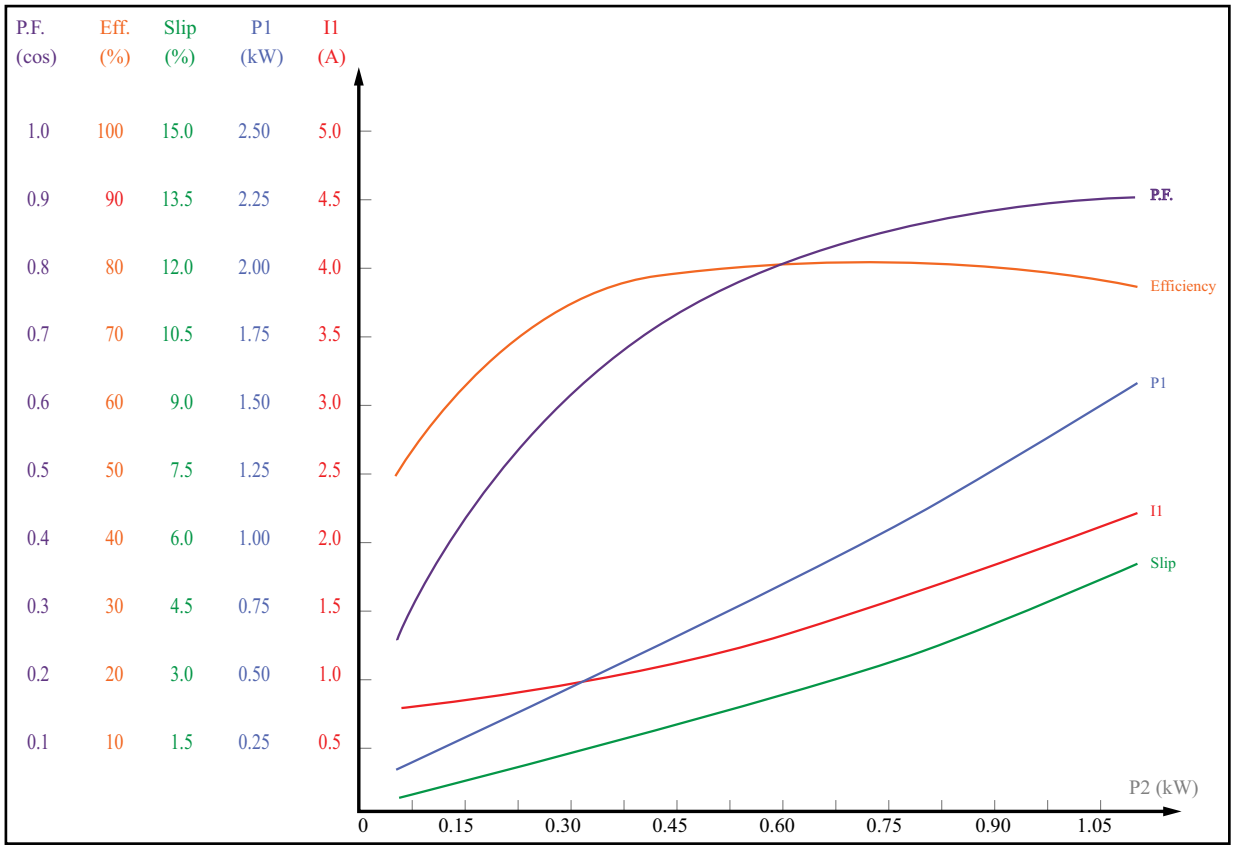
MTRP-001-3BD18



Performance Data - MTRP-001-3BD18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.2011	456.5	1.143	0.2726	1.045	1789.9	73.76	0.299
0.3868	453.1	1.251	0.4689	2.035	1780.7	82.49	0.470
0.5777	449.7	1.410	0.6782	3.065	1770.9	85.18	0.603
0.7636	445.7	1.607	0.8903	4.105	1760.5	85.76	0.696
0.8470	444.5	1.707	0.9882	4.565	1756.0	85.71	0.727
0.9483	443.2	1.834	1.1101	5.145	1749.4	85.42	0.759

Load Performance Data - MTRP-001-3BD18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	1.138	0.2585	0.541	72.74	0.285	0.1875
50	1.242	0.4563	1.040	82.14	0.460	0.3750
75	1.396	0.6612	1.570	85.11	0.594	0.5625
100	1.592	0.8744	2.142	85.73	0.690	0.7500
125	1.821	1.0970	2.770	85.48	0.755	0.9375

MTRP-001-3BD36

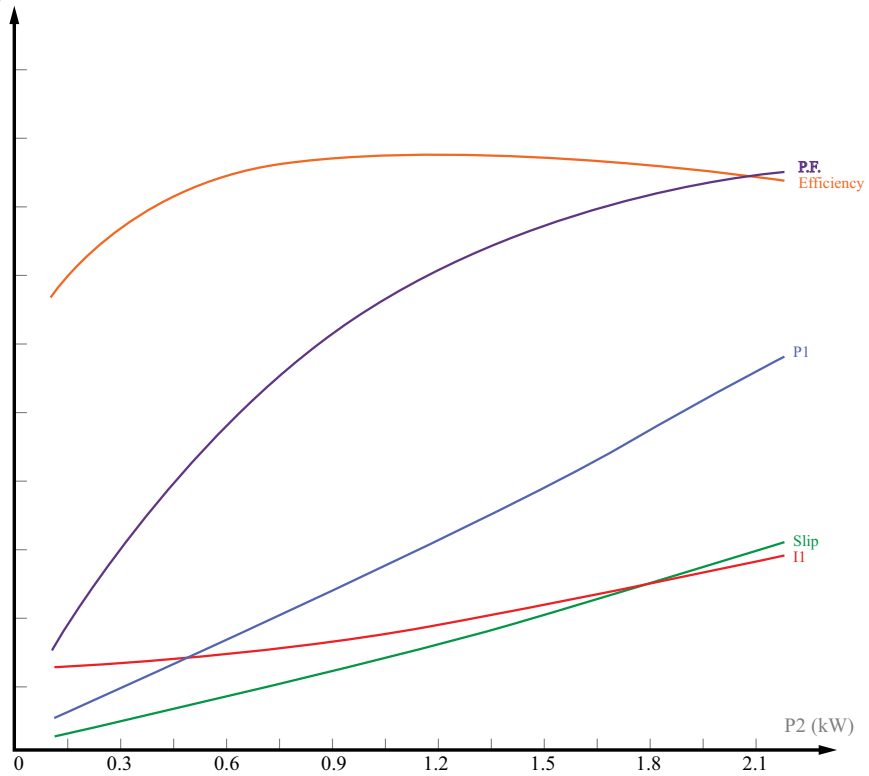


Performance Data - MTRP-001-3BD36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.2011	452.0	0.827	0.3058	0.527	3571.5	65.77	0.464
0.3880	446.7	0.973	0.5079	1.037	3547.3	76.40	0.654
0.5748	440.4	1.175	0.7204	1.557	3521.2	79.79	0.768
0.7628	434.2	1.424	0.9468	2.077	3493.5	80.56	0.833
0.9527	426.9	1.713	1.1912	2.617	3461.2	79.98	0.872
1.1374	419.5	2.035	1.4490	3.167	3423.7	78.49	0.894

Load Performance Data - MTRP-001-3BD36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	0.817	0.2912	0.738	64.56	0.446	0.1875
50	0.963	0.4938	1.428	75.93	0.644	0.3750
75	1.160	0.7059	2.131	79.77	0.762	0.5625
100	1.404	0.9306	2.899	80.45	0.830	0.7500
125	1.690	1.1713	3.784	80.11	0.870	0.9375

MTRP-002-3BD18

P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	15.0	5.0	15.0
0.9	90	13.5	4.5	13.5
0.8	80	12.0	4.0	12.0
0.7	70	10.5	3.5	10.5
0.6	60	9.0	3.0	9.0
0.5	50	7.5	2.5	7.5
0.4	40	6.0	2.0	6.0
0.3	30	4.5	1.5	4.5
0.2	20	3.0	1.0	3.0
0.1	10	1.5	0.5	1.5

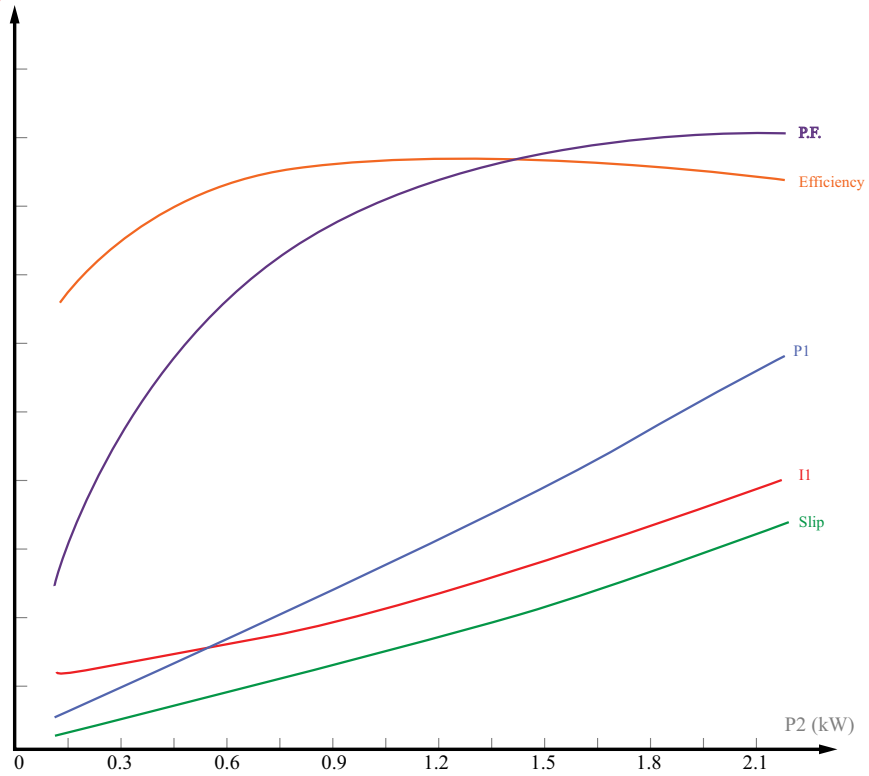


Performance Data - MTRP-002-3BD18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.3884	456.5	1.920	0.4977	2.031	1788.3	78.03	0.325
0.7659	453.7	2.171	0.8982	4.051	1777.0	85.27	0.519
1.1395	450.2	2.520	1.3113	6.111	1764.7	86.90	0.653
1.5144	447.9	2.953	1.7434	8.191	1752.4	86.86	0.740
1.8893	443.6	3.457	2.1959	10.311	1738.8	86.04	0.798
2.2565	440.6	4.007	2.6628	12.471	1724.4	84.74	0.834

Load Performance Data - MTRP-002-3BD18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	1.913	0.4837	0.657	77.63	0.317	0.3750
50	2.159	0.8814	1.255	85.06	0.513	0.7500
75	2.504	1.2947	1.911	86.97	0.648	1.1250
100	2.935	1.7263	2.621	86.79	0.738	1.5000
125	3.437	2.1786	3.379	86.12	0.795	1.8750

MTRP-002-3BD36

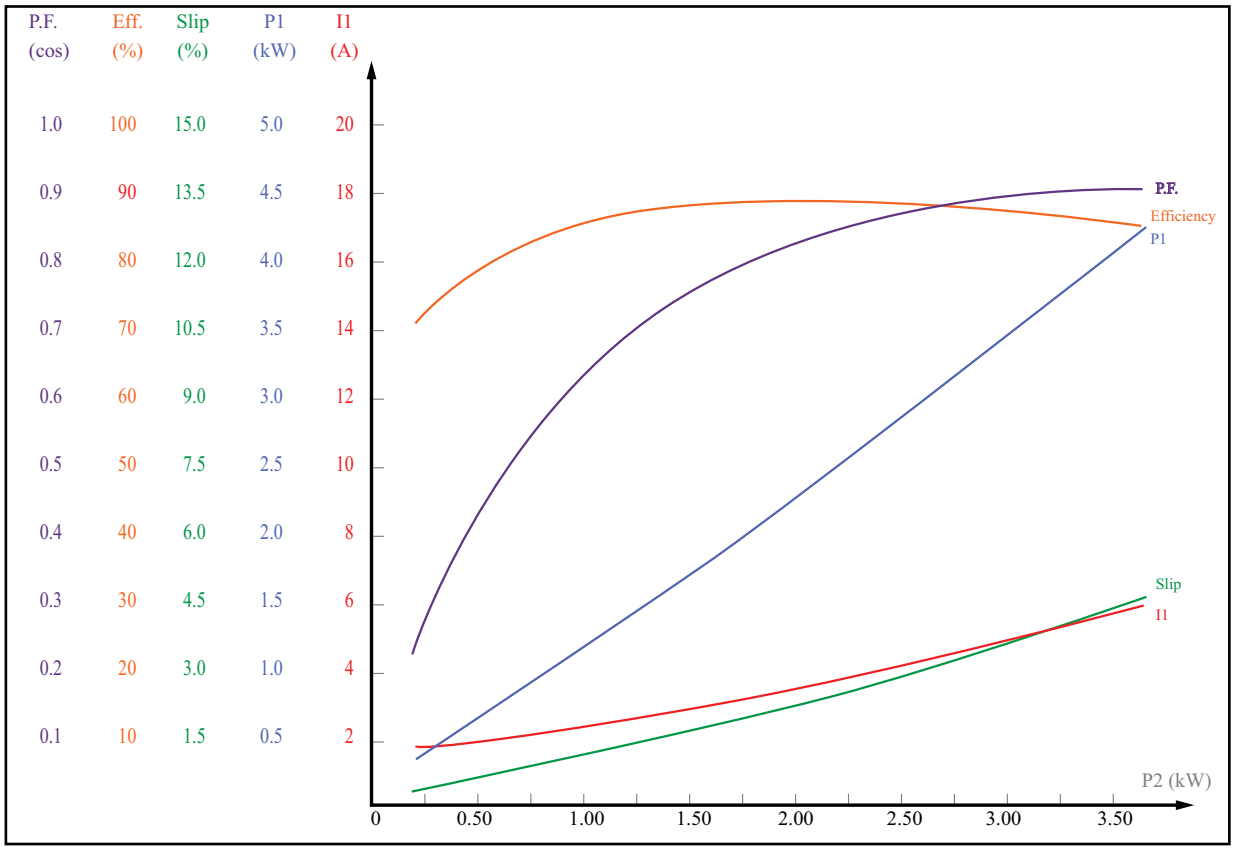
P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	15.0	5.0	10
0.9	90	13.5	4.5	9
0.8	80	12.0	4.0	8
0.7	70	10.5	3.5	7
0.6	60	9.0	3.0	6
0.5	50	7.5	2.5	5
0.4	40	6.0	2.0	4
0.3	30	4.5	1.5	3
0.2	20	3.0	1.0	2
0.1	10	1.5	0.5	1



Performance Data - MTRP-002-3BD36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.3901	455.7	1.301	0.5100	1.050	3573.5	76.49	0.492
0.7636	453.1	1.625	0.9066	2.070	3549.8	84.23	0.699
1.1381	449.1	2.059	1.3200	3.100	3524.8	86.22	0.804
1.5113	445.8	2.558	1.7497	4.140	3497.9	86.38	0.857
1.8859	441.3	3.116	2.2030	5.210	3468.4	85.61	0.887
2.2572	437.9	3.714	2.6759	6.290	3437.4	84.35	0.903

Load Performance Data - MTRP-002-3BD36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	1.289	0.4943	0.712	76.00	0.481	0.3750
50	1.615	0.8919	1.368	84.03	0.693	0.7500
75	2.039	1.3050	2.056	86.29	0.802	1.1250
100	2.541	1.7366	2.798	86.28	0.856	1.5000
125	3.102	2.1894	3.617	85.69	0.887	1.8750

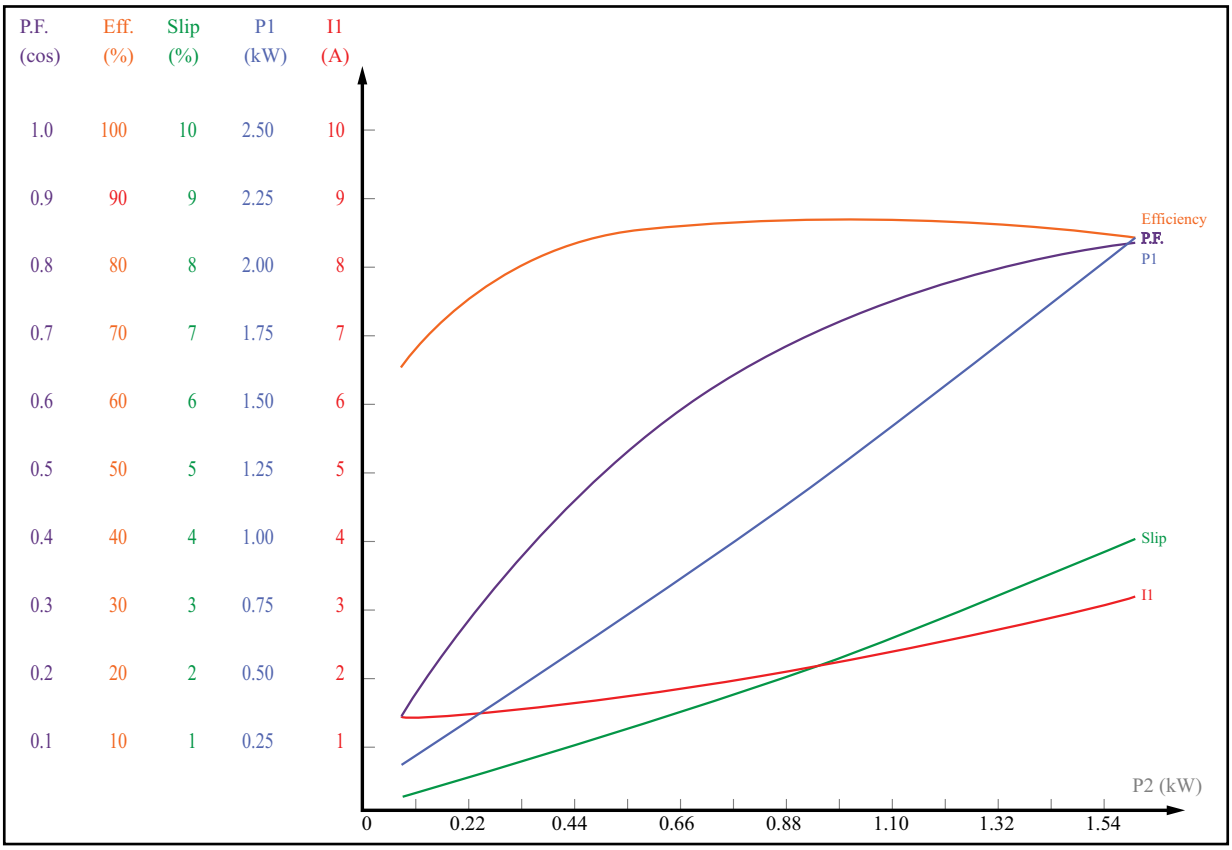
MTRP-003-3BD36



Performance Data - MTRP-003-3BD36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.5814	455.8	1.974	0.7255	1.539	3576.6	80.14	0.462
1.1407	453.5	2.445	1.3155	3.049	3555.0	86.72	0.675
1.6975	450.0	3.064	1.9239	4.569	3532.0	88.23	0.788
2.2630	446.4	3.797	2.5673	6.139	3507.2	88.15	0.848
2.8224	442.9	4.604	3.2325	7.729	3480.0	87.31	0.880
3.3716	438.7	5.473	3.9200	9.329	3450.6	86.01	0.899

Load Performance Data - MTRP-003-3BD36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	1.957	0.7031	0.627	79.75	0.451	0.5600
50	2.430	1.2934	1.197	86.54	0.669	1.1200
75	3.039	1.9044	1.819	88.30	0.785	1.6800
100	3.762	2.5402	2.507	88.09	0.846	2.2400
125	4.575	3.2056	3.277	87.38	0.880	2.8000

MTRP-1P5-3BD18

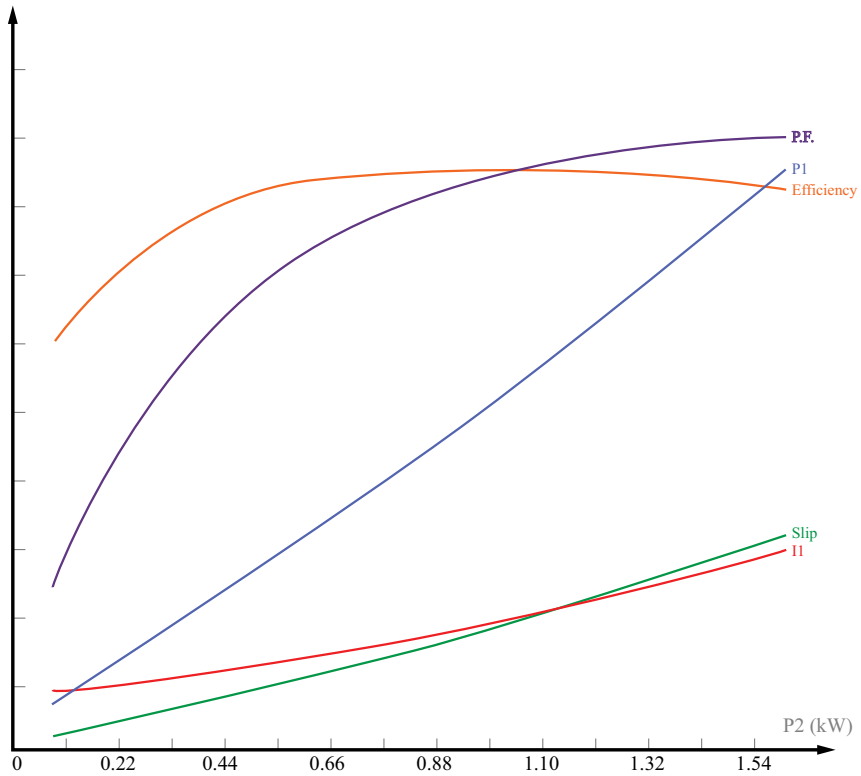


Performance Data - MTRP-1P5-3BD18							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.2882	457.0	1.486	0.3750	1.485	1789.6	76.86	0.317
0.5680	454.9	1.666	0.6709	2.985	1779.7	84.67	0.505
0.8415	452.4	1.917	0.9713	4.475	1769.4	86.63	0.635
1.1180	449.3	2.232	1.2873	5.995	1758.2	86.85	0.723
1.3873	446.8	2.581	1.6073	7.525	1747.0	86.31	0.780
1.6625	443.5	2.983	1.9508	9.105	1733.6	85.22	0.820

Load Performance Data - MTRP-1P5-3BD18						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	1.479	0.3612	0.545	76.28	0.306	0.2750
50	1.653	0.6517	1.095	84.33	0.495	0.5500
75	1.900	0.9528	1.673	86.68	0.628	0.8250
100	2.208	1.2660	2.287	86.79	0.719	1.1000
125	2.566	1.5927	2.943	86.37	0.778	1.3750

MTRP-1P5-3BD36

P.F. (cos)	Eff. (%)	Slip (%)	P1 (kW)	I1 (A)
1.0	100	15.0	2.50	10
0.9	90	13.5	2.25	9
0.8	80	12.0	2.00	8
0.7	70	10.5	1.75	7
0.6	60	9.0	1.50	6
0.5	50	7.5	1.25	5
0.4	40	6.0	1.00	4
0.3	30	4.5	0.75	3
0.2	20	3.0	0.50	2
0.1	10	1.5	0.25	1

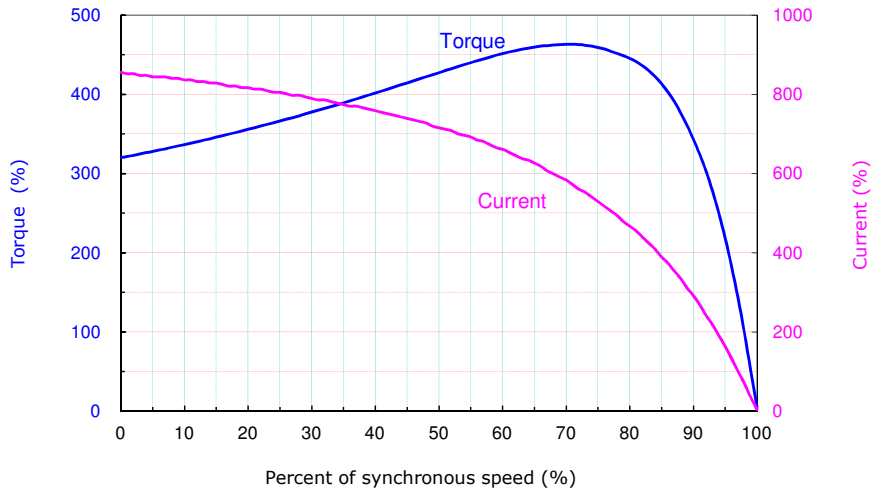


Performance Data - MTRP-1P5-3BD36							
P2 (kW)	***U (V)***	***I1 (A)***	***P1 (kW)***	***Torque (N•m)***	***Speed (RPM)***	***EFF (%)***	***P.F. (cos)***
0.2892	455.7	1.028	0.3944	0.776	3572.9	73.34	0.481
0.5620	452.6	1.255	0.6837	1.516	3551.4	82.20	0.683
0.8366	448.9	1.562	0.9867	2.266	3527.3	84.78	0.792
1.1114	445.2	1.928	1.3034	3.036	3501.2	85.27	0.848
1.3898	441.0	2.338	1.6387	3.816	3472.9	84.81	0.879
1.6550	437.2	2.766	1.9768	4.606	3443.0	83.72	0.897

Load Performance Data - MTRP-1P5-3BD36						
Load (%)	***Current (A)***	***Input (kW)***	***Slip (%)***	***EFF (%)***	***P.F. (cos)***	***Output (kW)***
25	1.018	0.3794	0.715	72.64	0.467	0.2750
50	1.245	0.6710	1.340	81.91	0.676	0.5500
75	1.547	0.9736	1.995	84.83	0.789	0.8250
100	1.910	1.2895	2.700	85.20	0.847	1.1000
125	2.318	1.6209	3.475	84.87	0.878	1.3750

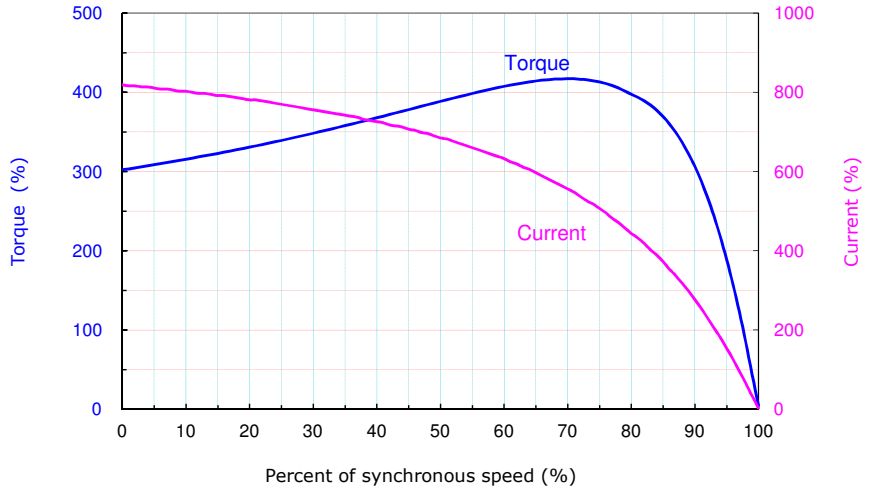
Speed/Torque Curves for MTCP2 Motors (1800 RPM)

MTCP2-001-3BD18(C)



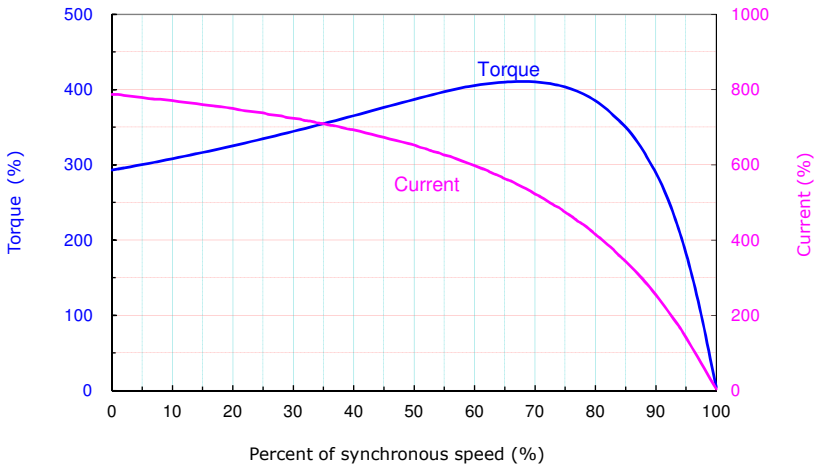
Rated Torque = 2.99 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 1.63A(460V)

MTCP2-1P5-3BD18(C)



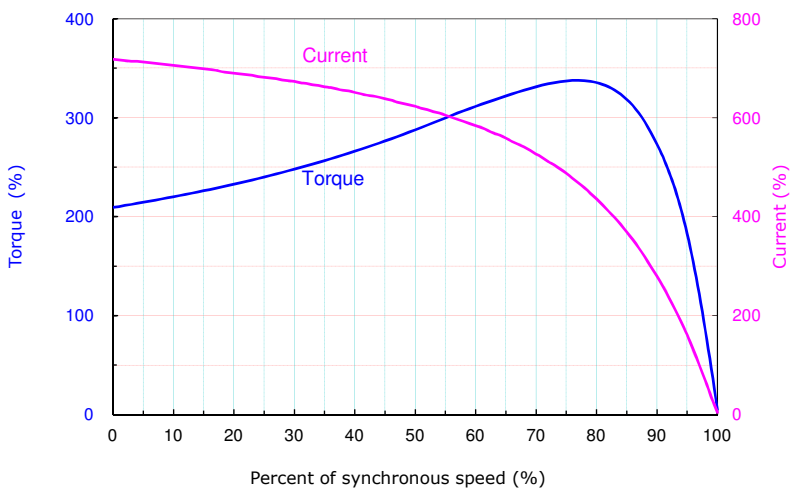
Rated Torque = 4.49 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 2.22A(460V)

MTCP2-002-3BD18(C)



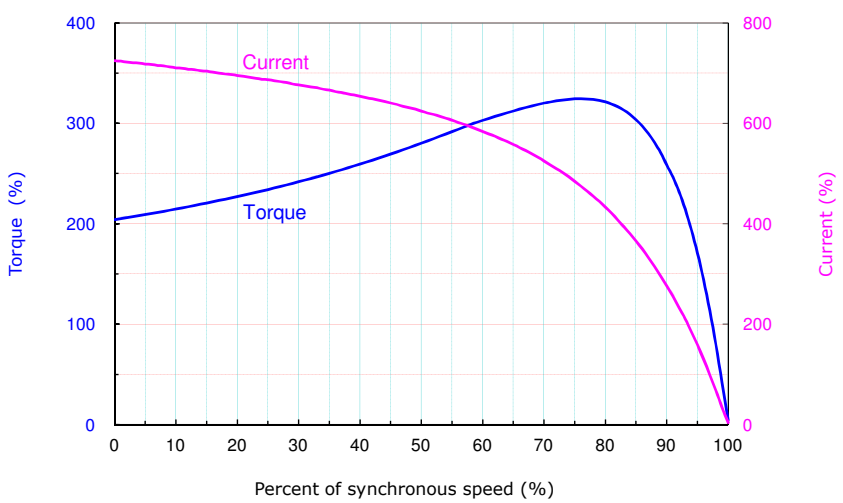
Rated Torque = 5.98 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 2.97A(460V)

MTCP2-003-3BD18(C)



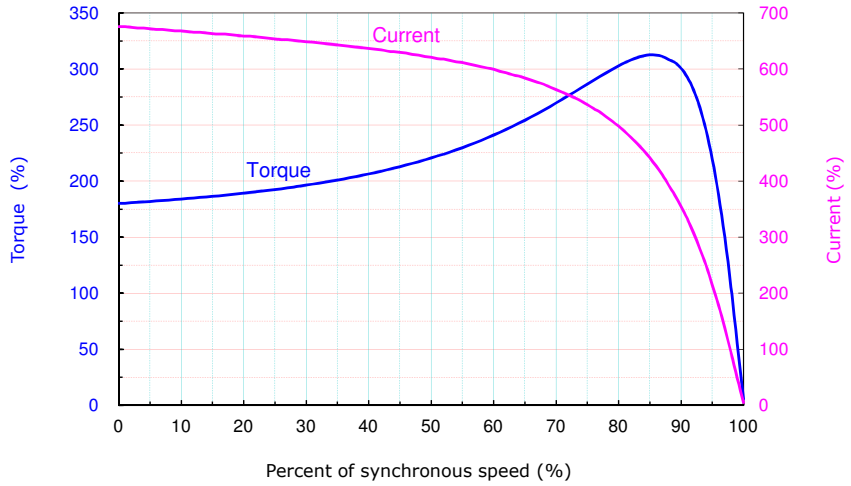
Rated Torque = 8.97 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 4.08A(460V)

MTCP2-005-3BD18(C)



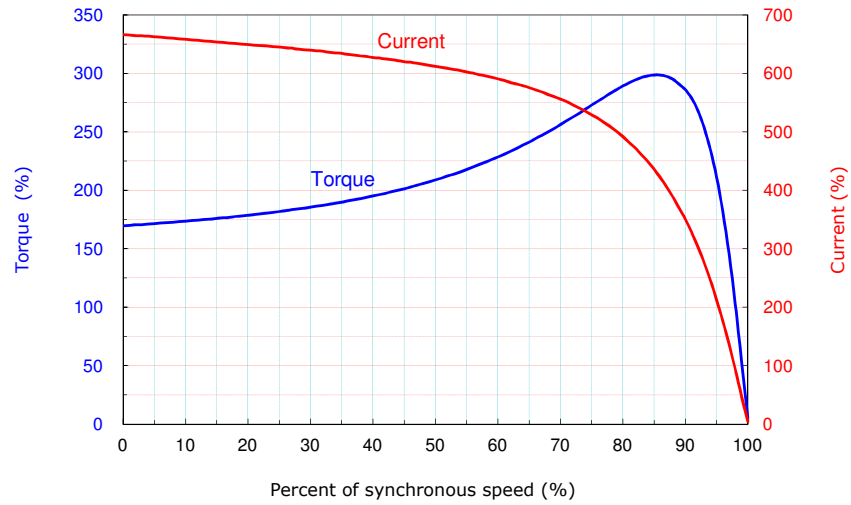
Rated Torque = 15 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 6.3A(460V)

MTCP2-7P5-3BD18(C)



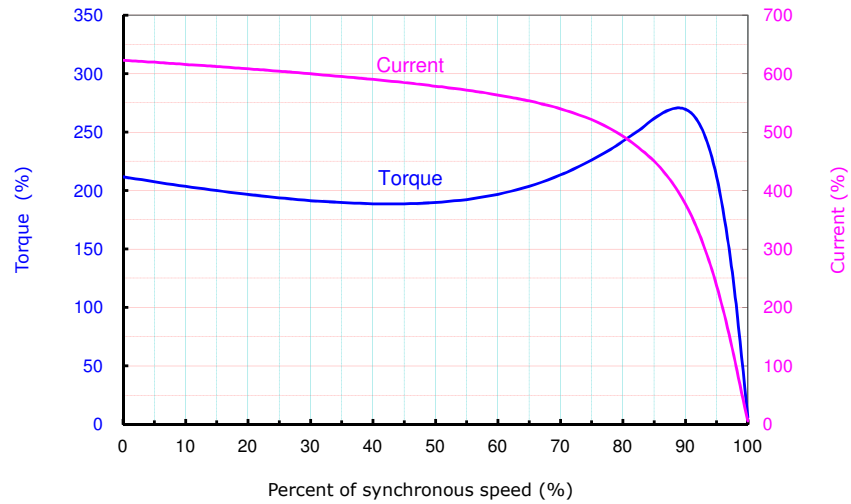
Rated Torque = 22.4 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 9.23 A(460V)

MTCP2-010-3BD18(C)



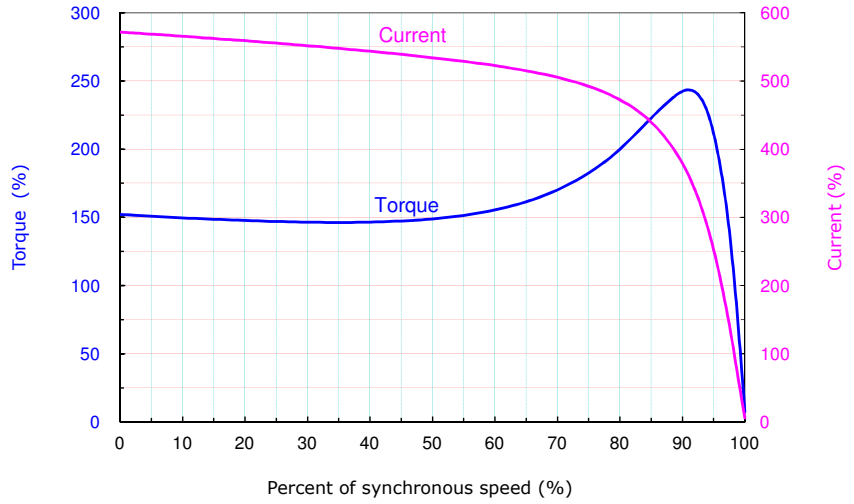
Rated Torque = 29.8 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 12.2A(460V)

MTCP2-020-3BD18(C)



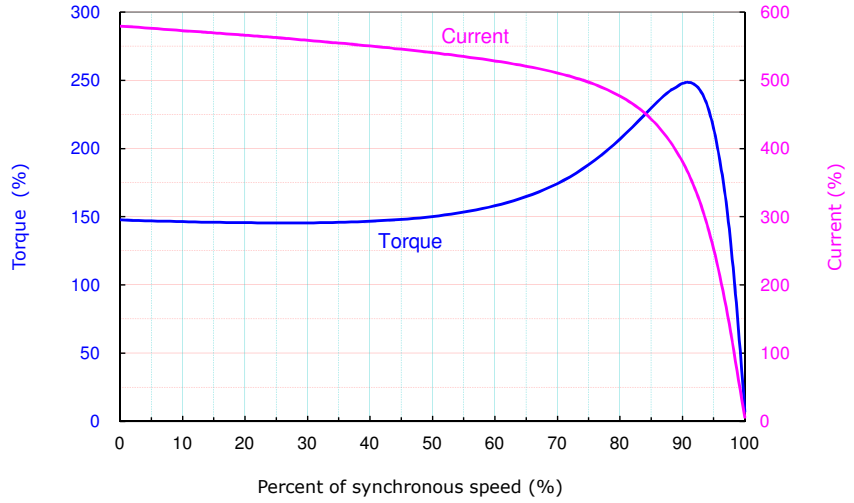
Rated Torque = 59.5 Lb.ft Synchronous Speed = 1800 r/min Rated Current =23.7A(460V)

MTCP2-025-3BD18(C)



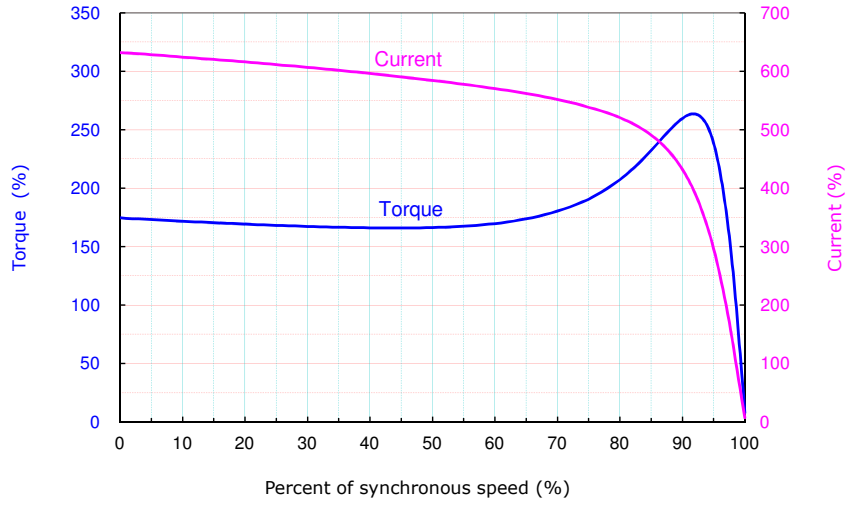
Rated Torque = 74.2 Lb.ft Synchronous Speed = 1800 r/min Rated Current =29.4 A(460V)

MTCP2-030-3BD18(C)



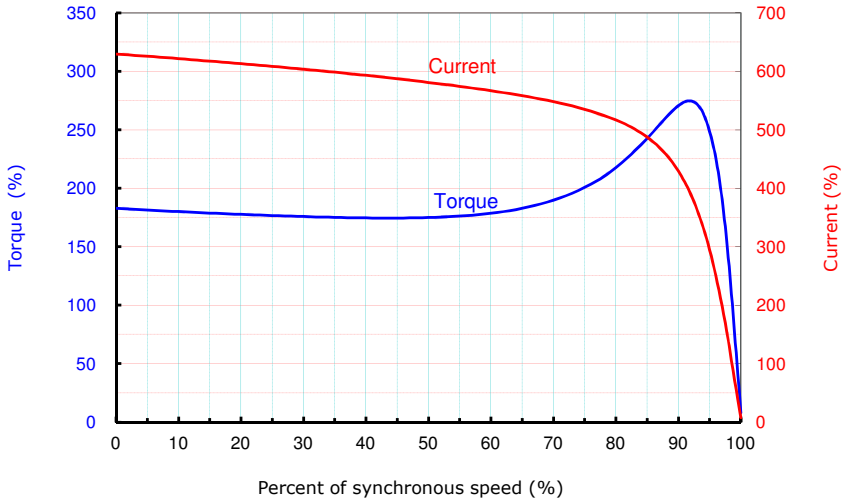
Rated Torque = 89 Lb.ft Synchronous Speed = 1800 r/min Rated Current =35.3A(460V)

MTCP2-040-3BD18



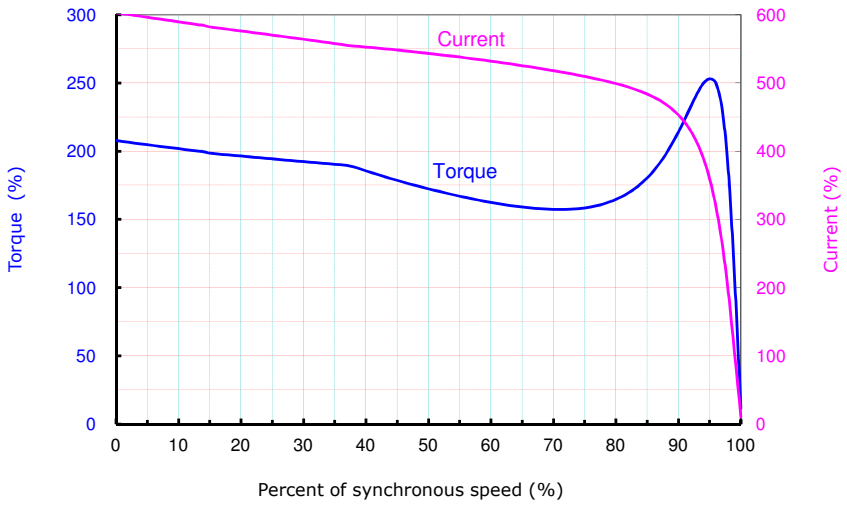
Rated Torque = 118 Lb.ft Synchronous Speed = 1800 r/min Rated Current =46.3 A(460V)

MTCP2-050-3BD18



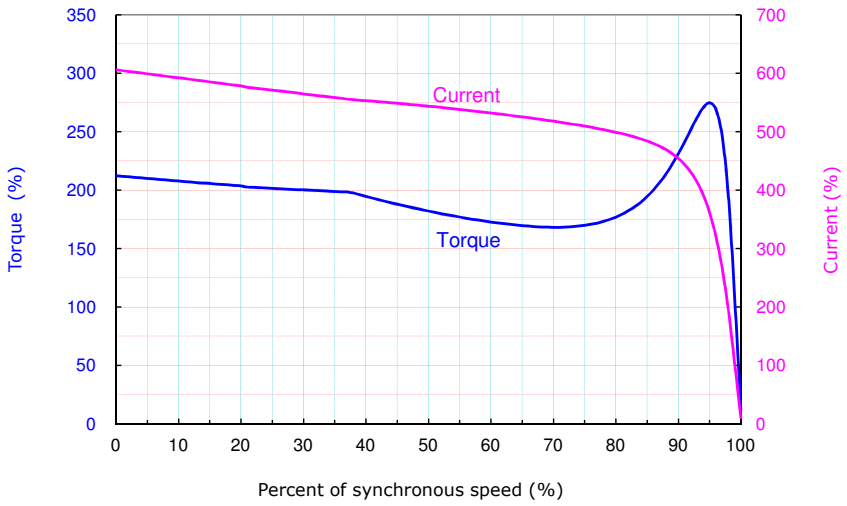
Rated Torque = 148 Lb.ft Synchronous Speed = 1800 r/min Rated Current =57.6A(460V)

MTCP2-060-3BD18



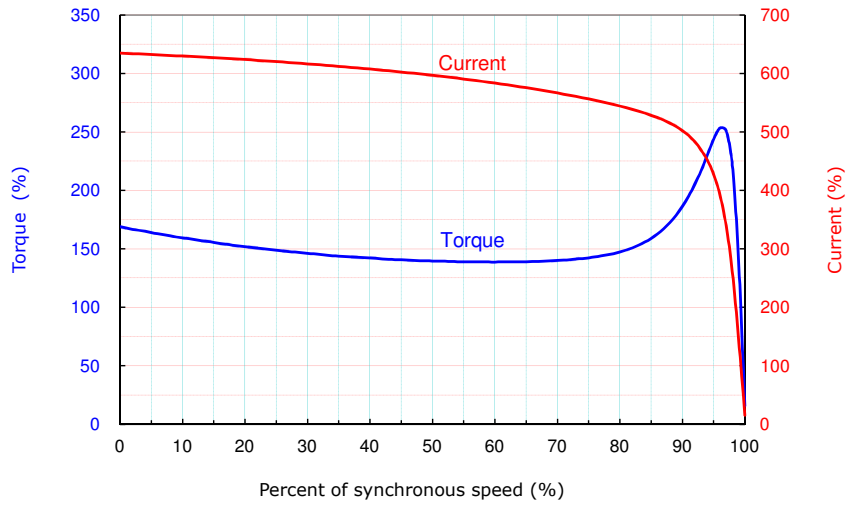
Rated Torque = 177 Lb.ft Synchronous Speed = 1800 r/min Rated Current =72.1A(460V)

MTCP2-075-3BD18



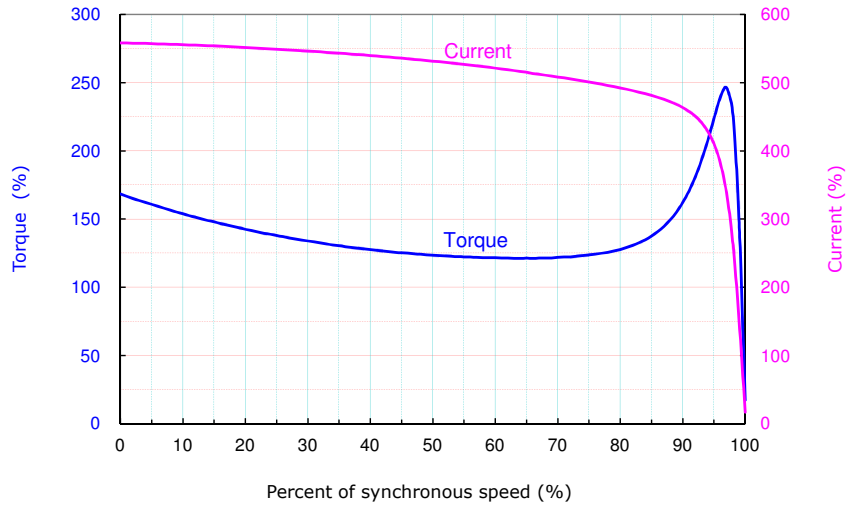
Rated Torque = 221 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 88.7A(460V)

MTCP2-100-3BD18



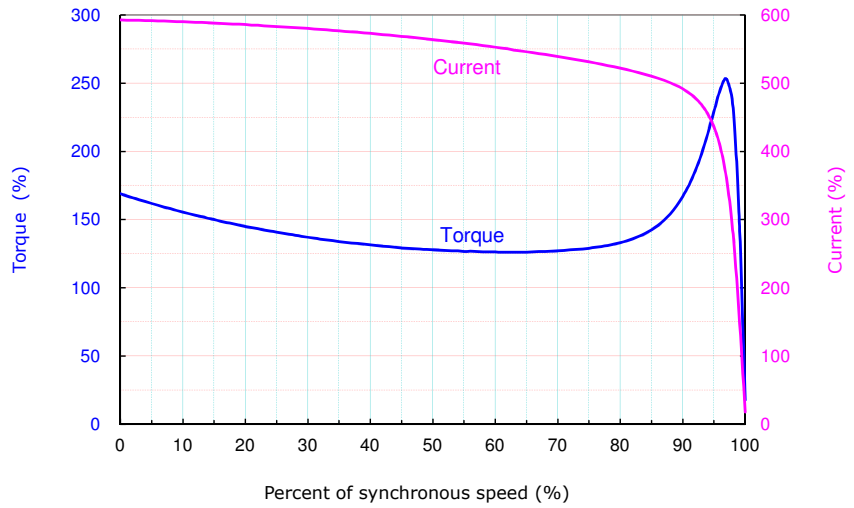
Rated Torque = 294 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 114A(460V)

MTCP2-125-3BD18



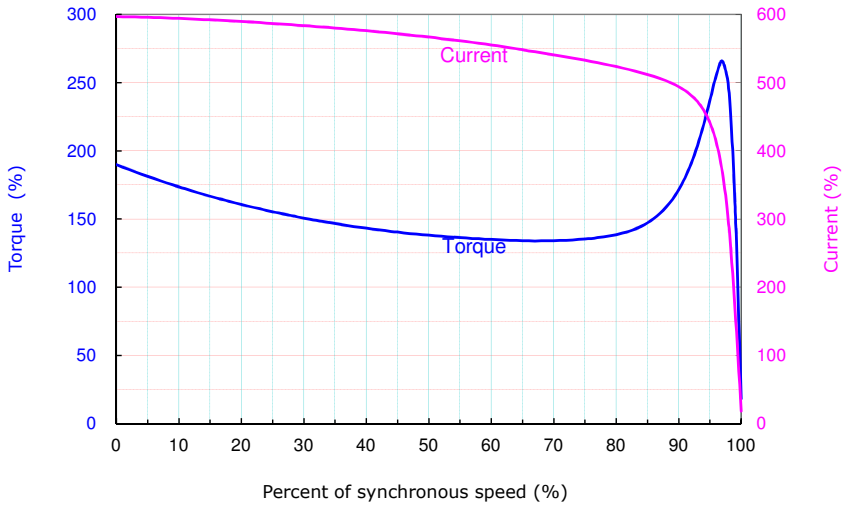
Rated Torque = 367 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 116 A(460V)

MTCP2-150-3BD18



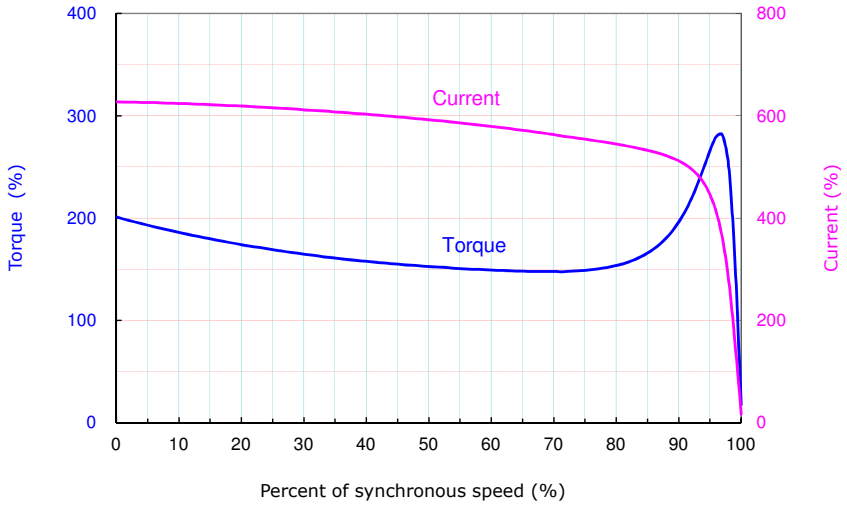
Rated Torque = 440 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 172A(460V)

MTCP2-200-3BD18



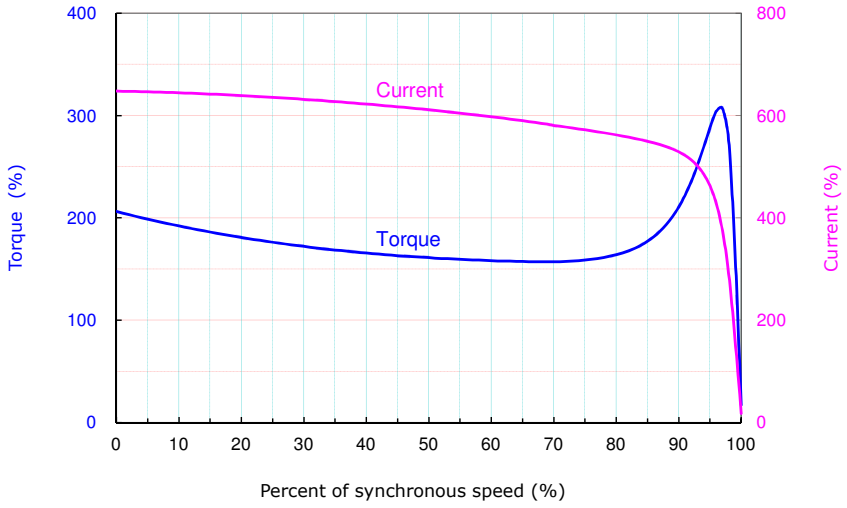
Rated Torque = 587 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 229 A(460V)

MTCP2-250-3D18



Rated Torque =773 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 280 A(460V)

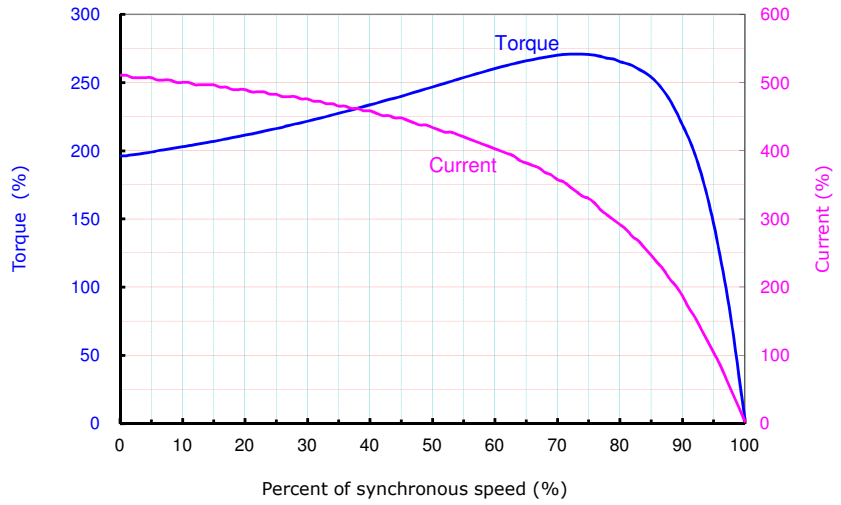
MTCP2-300-3D18



Rated Torque =880 Lb.ft Synchronous Speed = 1800 r/min Rated Current = 336 A(460V)

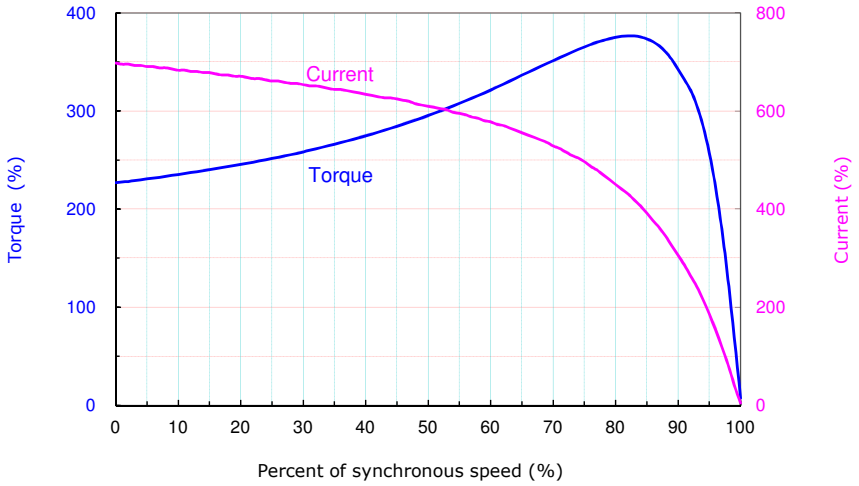
Speed/Torque Curves for MTCP2 Motors (1200 RPM)

MTCP2-001-3BD12



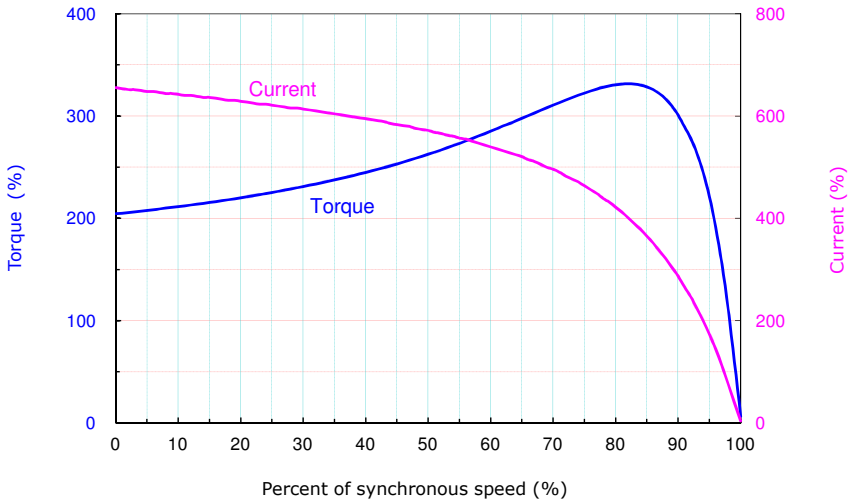
Rated Torque = 4.53 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 1.67A(460V)

MTCP2-1P5-3BD12



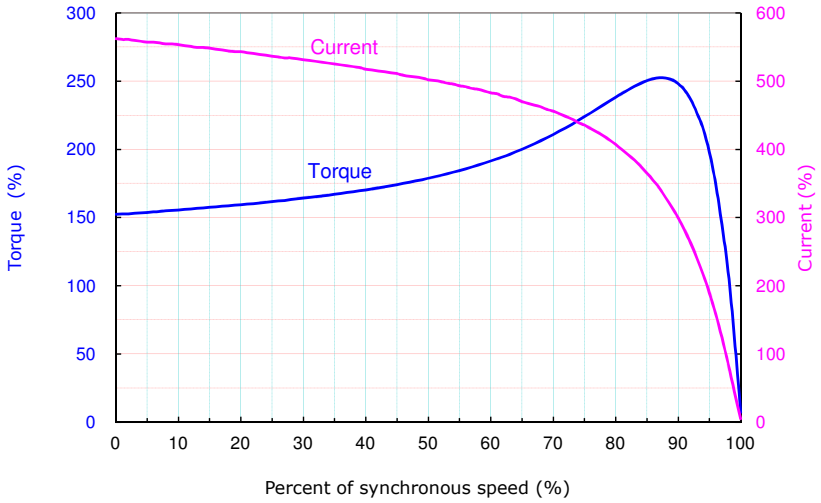
Rated Torque = 6.67 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 2.36A(460V)

MTCP2-002-3BD12



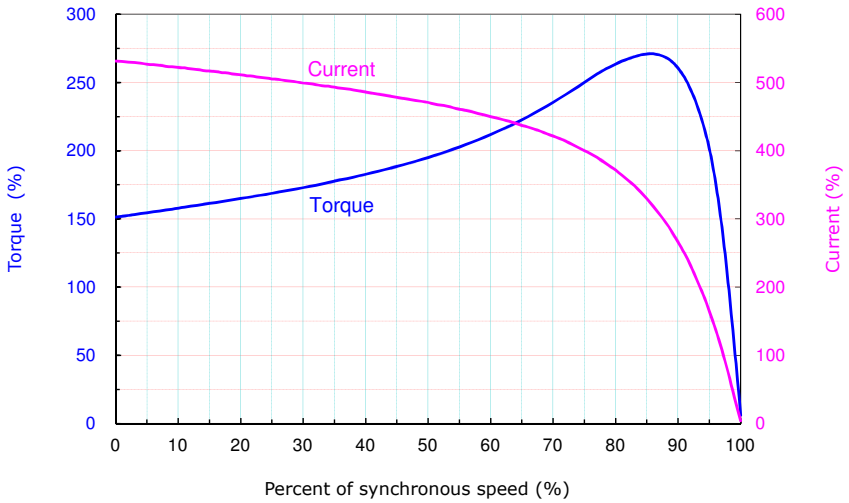
Rated Torque = 8.94 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 2.98A(460V)

MTCP2-003-3BD12



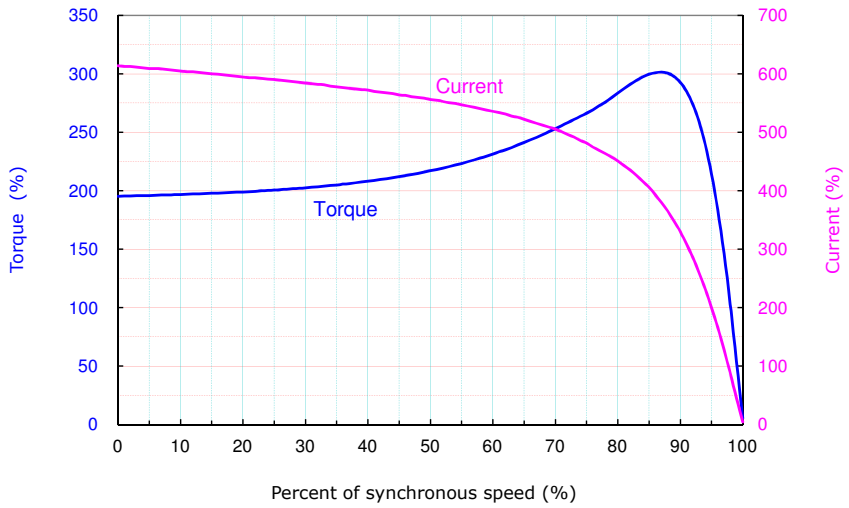
Rated Torque = 13.3 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 4.36 A(460V)

MTCP2-005-3BD12



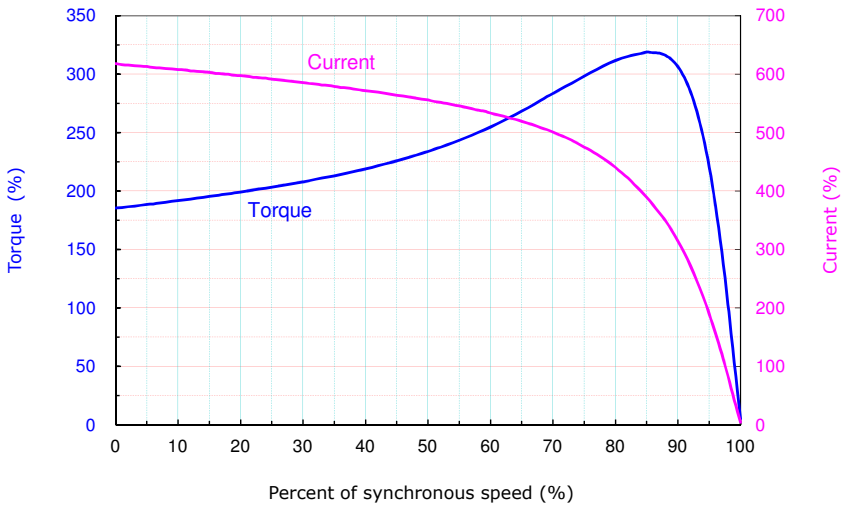
Rated Torque = 22.3 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 7.27 A(460V)

MTCP2-7P5-3BD12



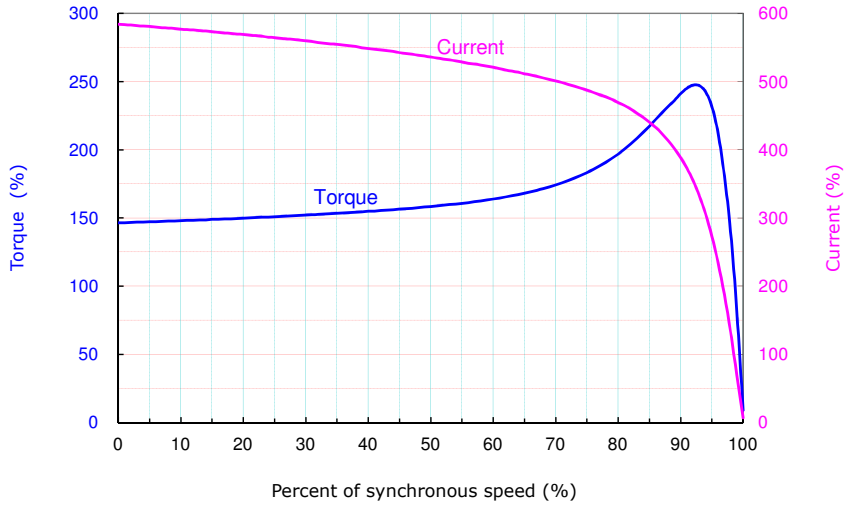
Rated Torque = 33.5 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 9.41 A(460V)

MTCP2-010-3BD12



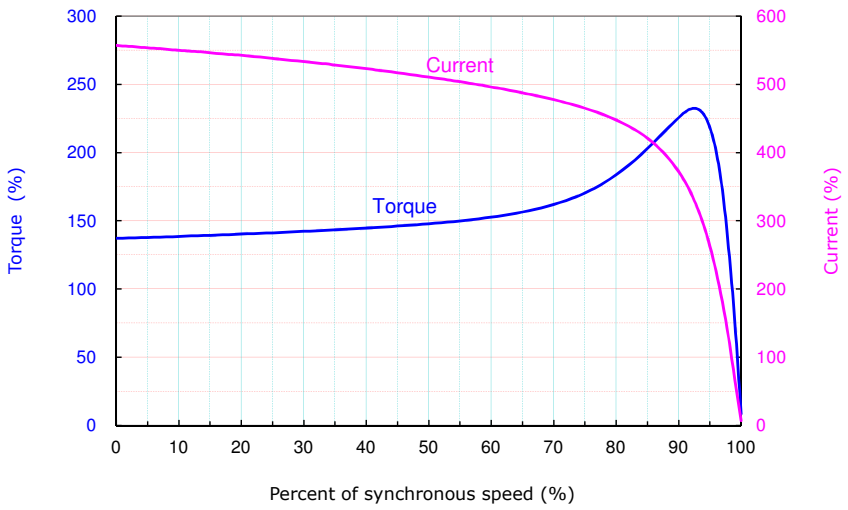
Rated Torque = 44.7 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 12.5 A(460V)

MTCP2-015-3BD12



Rated Torque = 66.5 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 18.7 A(460V)

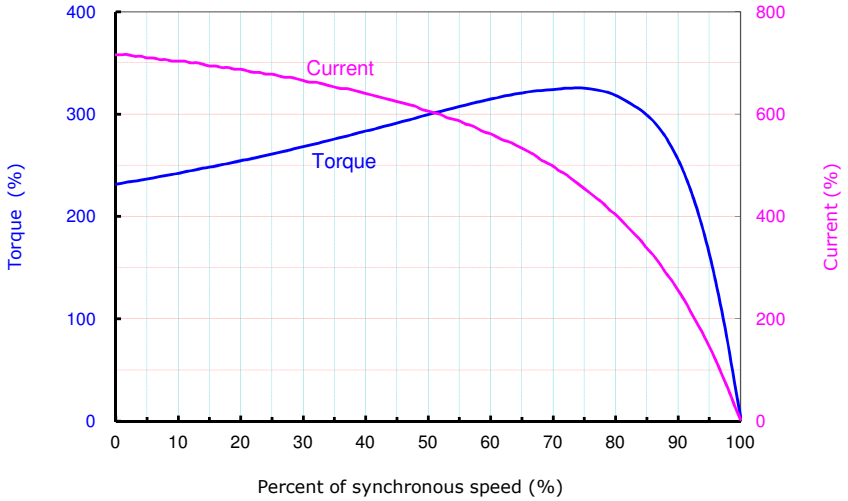
MTCP2-020-3BD12



Rated Torque = 88.6 Lb.ft Synchronous Speed = 1200 r/min Rated Current = 24.6 A(460V)

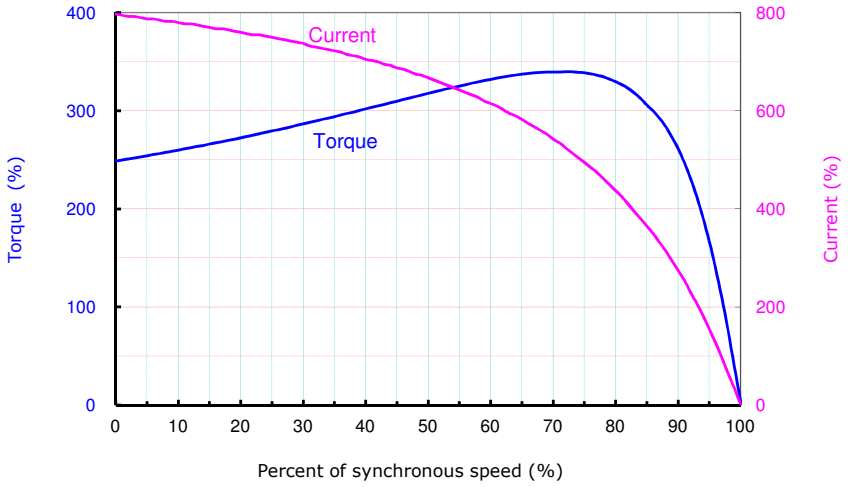
Speed/Torque Curves for MTCP2 Motors (3600 RPM)

MTCP2-1P5-3BD36



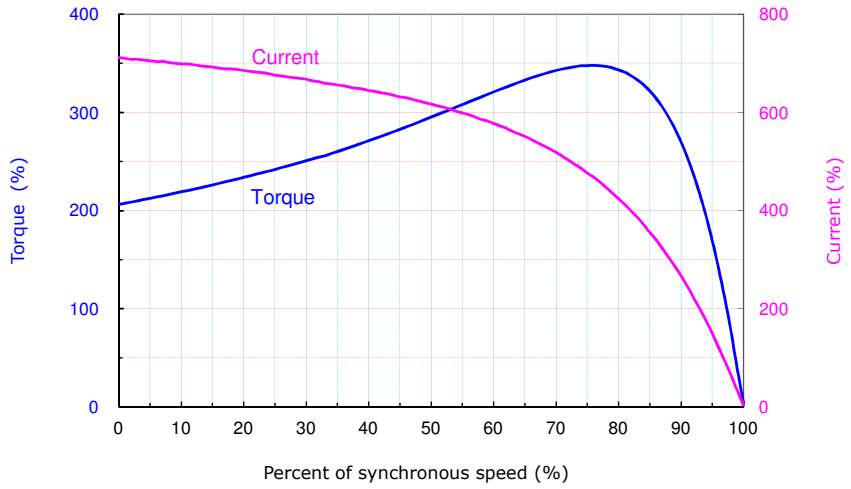
Rated Torque = 2.26 Lb.ft Synchronous Speed = 3600 r/min Rated Current = 2.26A(460V)

MTCP2-002-3BD36



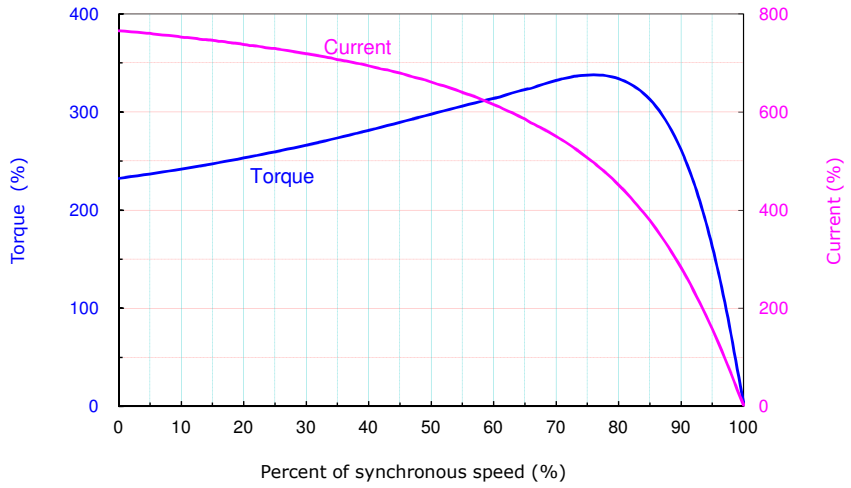
Rated Torque = 3.01 Lb.ft Synchronous Speed = 3600 r/min Rated Current = 2.61A(460V)

MTCP2-003-3BD36



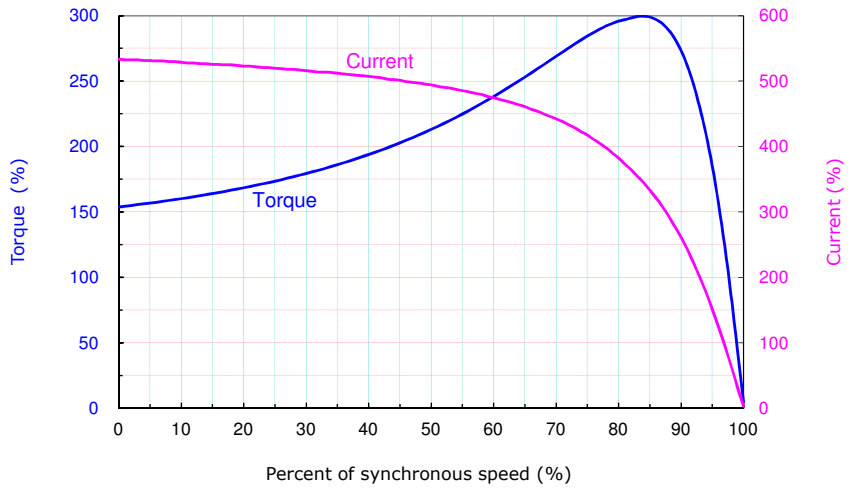
Rated Torque = 4.51 Lb.ft Synchronous Speed = 3600 r/min Rated Current = 3.82A(460V)

MTCP2-005-3BD36



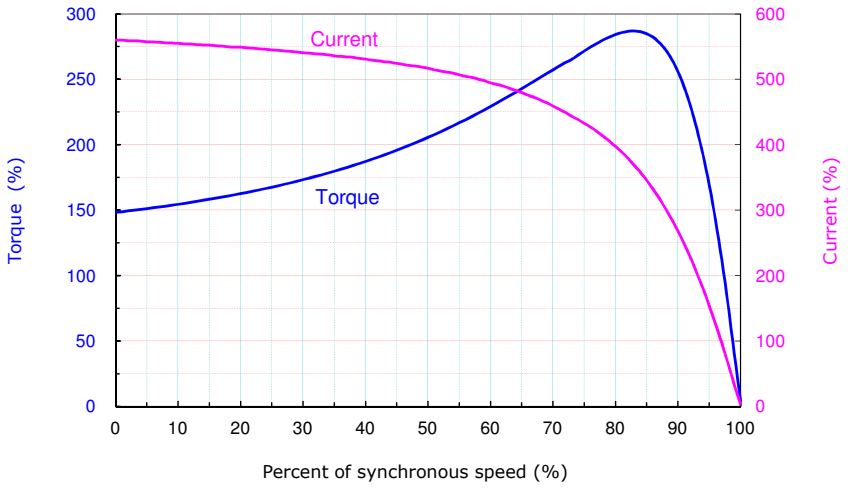
Rated Torque = 7.52 Lb.ft Synchronous Speed = 3600 r/min Rated Current =6.01A(460V)

MTCP2-7P5-3BD36



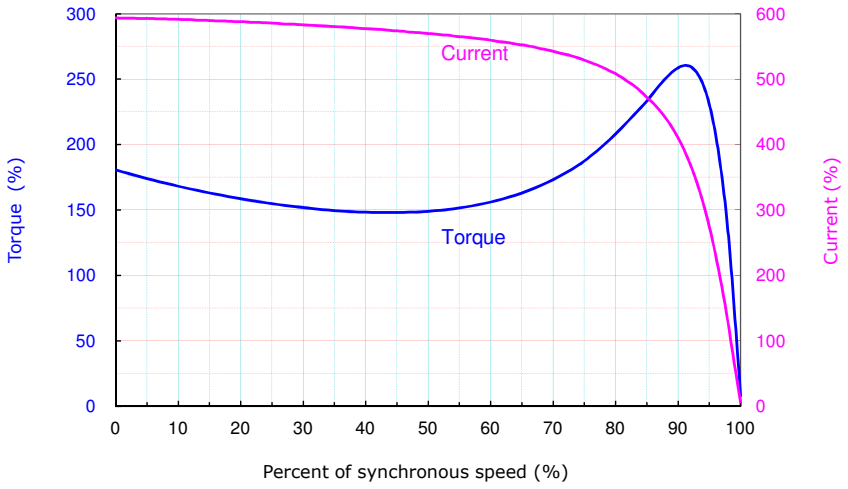
Rated Torque = 11.2 Lb.ft Synchronous Speed = 3600 r/min Rated Current = 9.45 A(460V)

MTCP2-010-3BD36



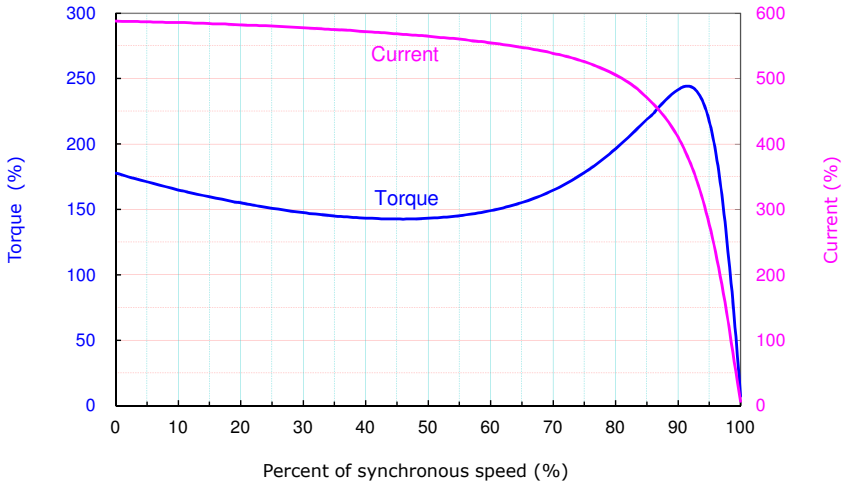
Rated Torque = 15.0 Lb.ft Synchronous Speed = 3600 r/min Rated Current = 12.2 A(460V)

MTCP2-015-3BD36



Rated Torque = 22.2 Lb.ft Synchronous Speed = 3600 r/min Rated Current = 17.3 A(460V)

MTCP2-020-3BD36



Rated Torque = 29.7 Lb.ft Synchronous Speed = 3600 r/min Rated Current = 22.9 A(460V)

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