


ABB Motors and Generators	Technical Data Sheet - DOL			
	Project	Location		

Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident

No.	Definition	Data	Unit	Remarks
1	Product	TEFC, 3-phase, squirrel cage induction motor		
2	Product code	MM18224-EX2 (3GJP182420-ADH+332+461)		
3	Type/Frame	M3JP 180 MLB 4		
4	Mounting	IM1001, B3(foot)		
5	Rated output P _N	22	kW	
6	Service factor	1		
7	Type of duty	S1(IEC) 100%		
8	Rated voltage U _N	400	VD	± 5 % (IEC 60034-1)
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)
10	Rated speed n _N	1474	r/min	
11	Rated current I _N	42	A	
12	No-load current	18.5	A	
13	Starting current I _s /I _N	7.9		Fullfilled IEC 60034-12 design N,H
14	Nominal torque T _N	143	Nm	
15	Locked rotor torque T _S /T _N	2.9		
16	Maximum torque T _{max} /T _N	3.4		
17	Minimum torque T _{mir} /T _N	2.5		
18	Speed at minimum torque	225	r/min	
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %
20	PLL determined from residual loss	100	42	92.2 / IE2
21		75	33.3	92.8
22		50	25.6	92.3
23		Start	331	0.5
24	Maximum starting time from hot	15	s	
25	Maximum starting time from cold	27	s	
26	Insulation class / Temperature class	F / B		
27	Ambient temperature	40	°C	
28	Altitude	1000	m.a.s.l.	
29	Enclosure	IP55		
30	Cooling system	IC411 self ventilated		
31	Bearing DE/NDE	6310/C3 - 6310/C3		
32	Type of Grease	Lithium based		
33	Sound pressure level (LP dB(A) 1m)	62	dB(A)	at load
34	Moment of inertia J = ¼ GD2	0.23	kg-m2	
35	Balancing	Half Key		
36	Vibration class	Grade A		
37	Position of terminal box	Top		
38	Terminal box entries; no, dims.	2xM40x1.5 + 2xM20x1.5		
39	Number of power terminals	6		
40	Direction of rotation	CW or CCW		
41	Weight of rotor	60	kg	
42	Total weight of motor	296	kg	
43				


Ex-motors				
44	Type of protection	*Ex d IIC T4		
45				

Variant Codes / Definition

332 = Baldor catalog number
461 = Exd design, group IIC

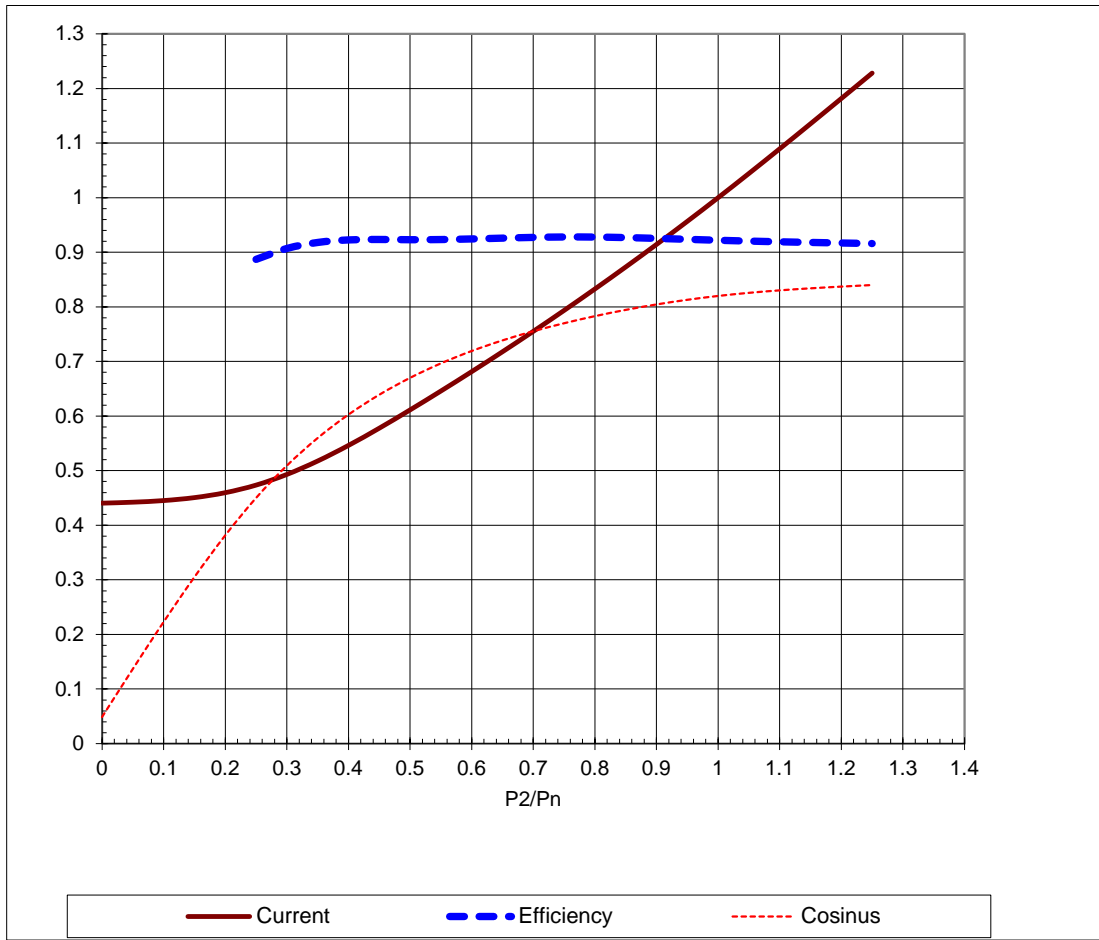
Remarks:

Data based on situation 8/17/2012
All data subject to tolerances in accordance with IEC
Guaranteed values on request
* For more information on the Atex/IECEx rating, please contact your local Baldor representative.


ABB Motors and Generators	Load Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident
			Pages 2(3)

Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3JP 180 MLB 4	Calc. ref.	3GZF021018-29
Product code	MM18224-EX2		
Rated output P _N	22	kW	
Type of duty	S1(IEC) 100%		

Voltage (V)	400	Current I _N (A)	42	Power factor at P _N	0.82
Frequency (Hz)	50	Speed (r/min)	1474	Efficiency (%) at P _N	92.2

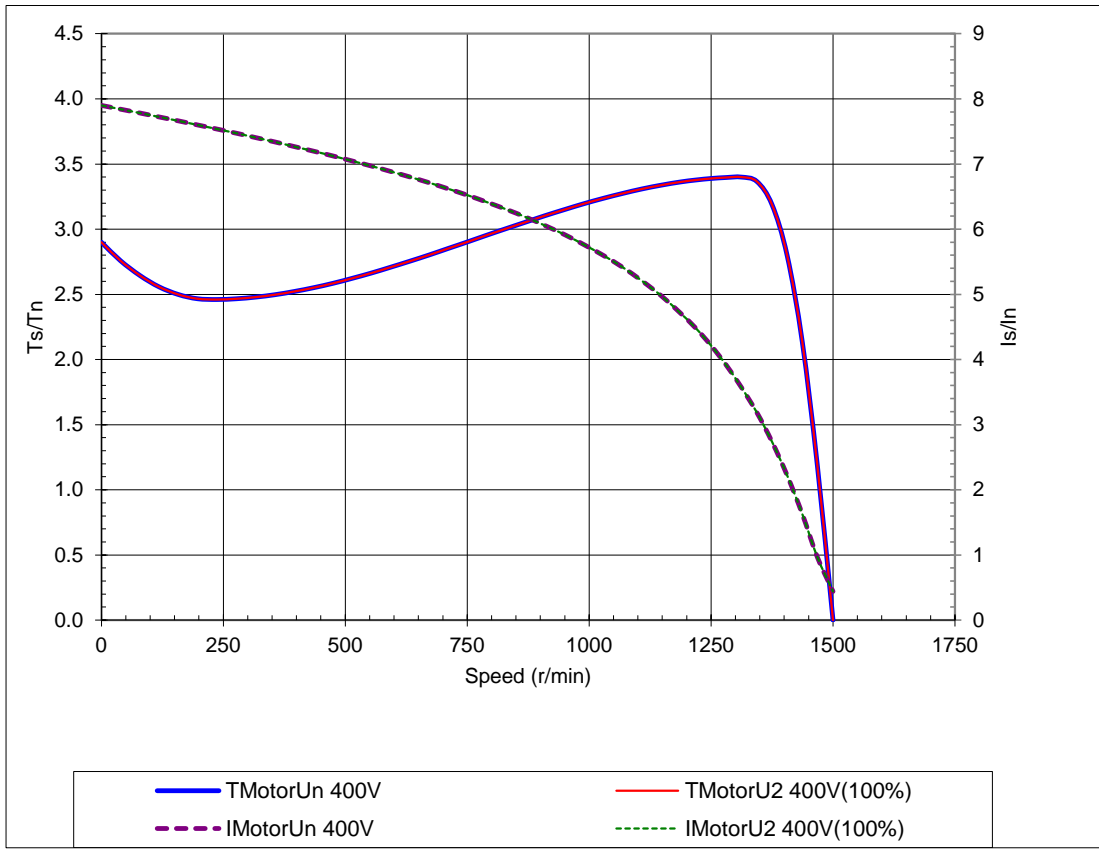


Load characteristics (IEC 60034-2-1:2007)
 Data based on situation 8/17/2012
 All data subject to tolerances in accordance with IEC

ABB Motors and Generators	Starting Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed b Date of issue	Saving ident	Pages 3(3)

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3JP 180 MLB 4	Calc. ref.	3GZF021018-29
Product code	MM18224-EX2	Frequency (Hz)	50
Rated output P _N	22 kW	Rated current I _N	42 A
Type of duty	S1(IEC) 100%		

J _{motor} (kgm ²)	0.23	Voltage (V) 100%	400	Voltage (V)	400V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.9	T _{start} /T _N	2.9
Speed (r/min)	1474	Starting time (s)		Run-up time (s)	
T _N (Nm)	143	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	7.9	I _s /I _n	7.9
Nbr. of consecutive starts		T _{max} /T _n	3.4	T _{max} /T _n	3.4



Load characteristics (IEC 60034-2-1:2007)
 Data based on situation 8/17/2012
 All data subject to tolerances in accordance with IEC

ABB Motors and Generators	Technical Data Sheet - DOL			
	Project	Location		

Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident


No.	Definition	Data	Unit	Remarks
1	Product	TEFC, 3-phase, squirrel cage induction motor		
2	Product code	MM18224-EX2 (3GJP182420-ADH+332+461)		
3	Type/Frame	M3JP 180 MLB 4		
4	Mounting	IM1001, B3(foot)		
5	Rated output P _N	22	kW	
6	Service factor	1		
7	Type of duty	S1(IEC) 100%		
8	Rated voltage U _N	415	VD	± 5 % (IEC 60034-1)
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)
10	Rated speed n _N	1476	r/min	
11	Rated current I _N	41.4	A	
12	No-load current	20	A	
13	Starting current I _s /I _N	8.4		Fullfilled IEC 60034-12 design N,H
14	Nominal torque T _N	142	Nm	
15	Locked rotor torque T _S /T _N	3.2		
16	Maximum torque T _{max} /T _N	3.7		
17	Minimum torque T _{min} /T _N	2.6		
18	Speed at minimum torque	225	r/min	
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %
20	PLL determined from residual loss	100	41.4	92.2 / IE2
21		75	33.4	0.8
22		50	26.4	0.74
23		Start	348	0.63
24	Maximum starting time from hot	15	s	
25	Maximum starting time from cold	30	s	
26	Insulation class / Temperature class	F / B		
27	Ambient temperature	40	°C	
28	Altitude	1000	m.a.s.l.	
29	Enclosure	IP55		
30	Cooling system	IC411 self ventilated		
31	Bearing DE/NDE	6310/C3 - 6310/C3		
32	Type of Grease	Lithium based		
33	Sound pressure level (LP dB(A) 1m)	62	dB(A)	at load
34	Moment of inertia J = ¼ GD2	0.23	kg-m2	
35	Balancing	Half Key		
36	Vibration class	Grade A		
37	Position of terminal box	Top		
38	Terminal box entries; no, dimens.	2xM40x1.5 + 2xM20x1.5		
39	Number of power terminals	6		
40	Direction of rotation	CW or CCW		
41	Weight of rotor	60	kg	
42	Total weight of motor	296	kg	
43				
Ex-motors				
44	Type of protection	*Ex d IIC T4		
45				

Variant Codes / Definition

332 = Baldor catalog number
461 = Exd design, group IIC

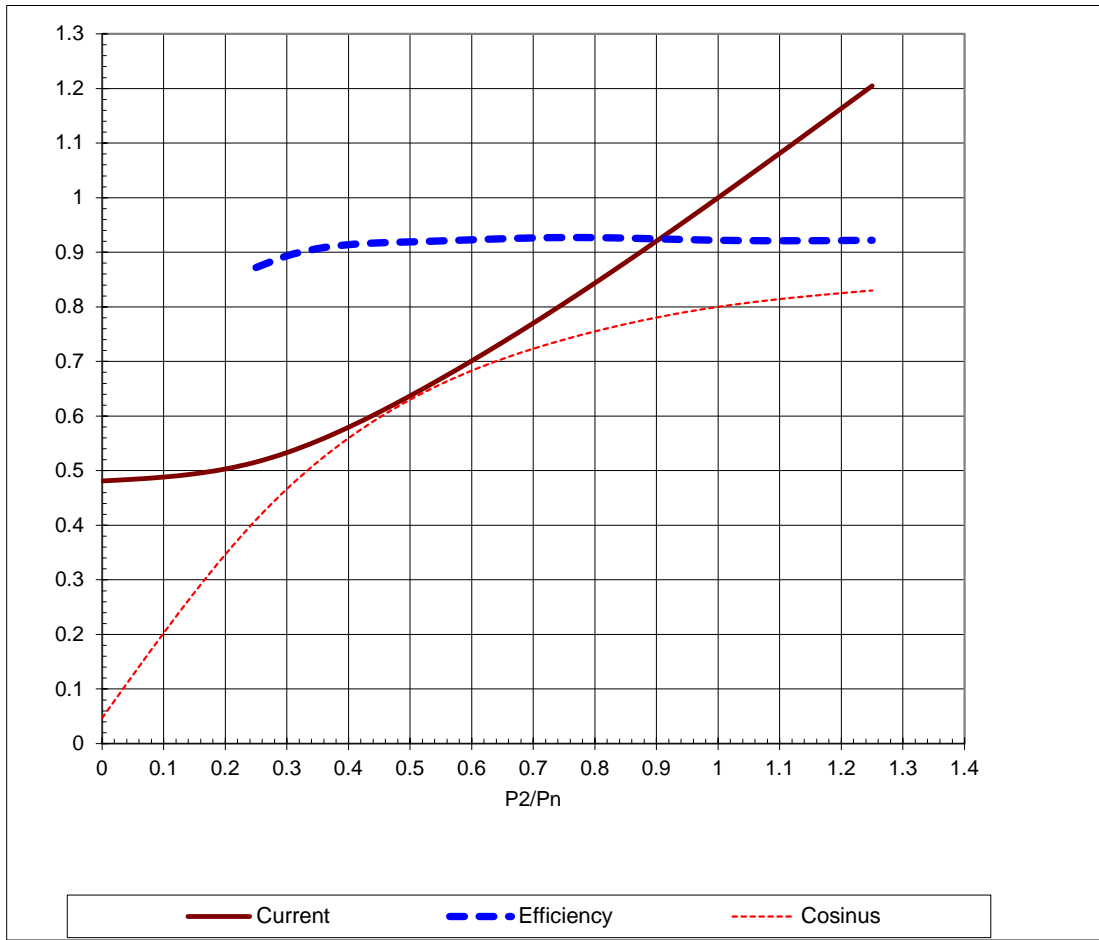
Remarks:

Data based on situation 8/17/2012
All data subject to tolerances in accordance with IEC
Guaranteed values on request
* For more information on the Atex/IECEx rating, please contact your local Baldor representative.


ABB Motors and Generators	Load Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident
			Pages 2(3)

Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3JP 180 MLB 4	Calc. ref.	3GZF021018-29
Product code	MM18224-EX2		
Rated output P _N	22	kW	
Type of duty	S1(IEC) 100%		

Voltage (V)	415	Current I _N (A)	41.4	Power factor at P _N	0.8
Frequency (Hz)	50	Speed (r/min)	1476	Efficiency (%) at P _N	92.2

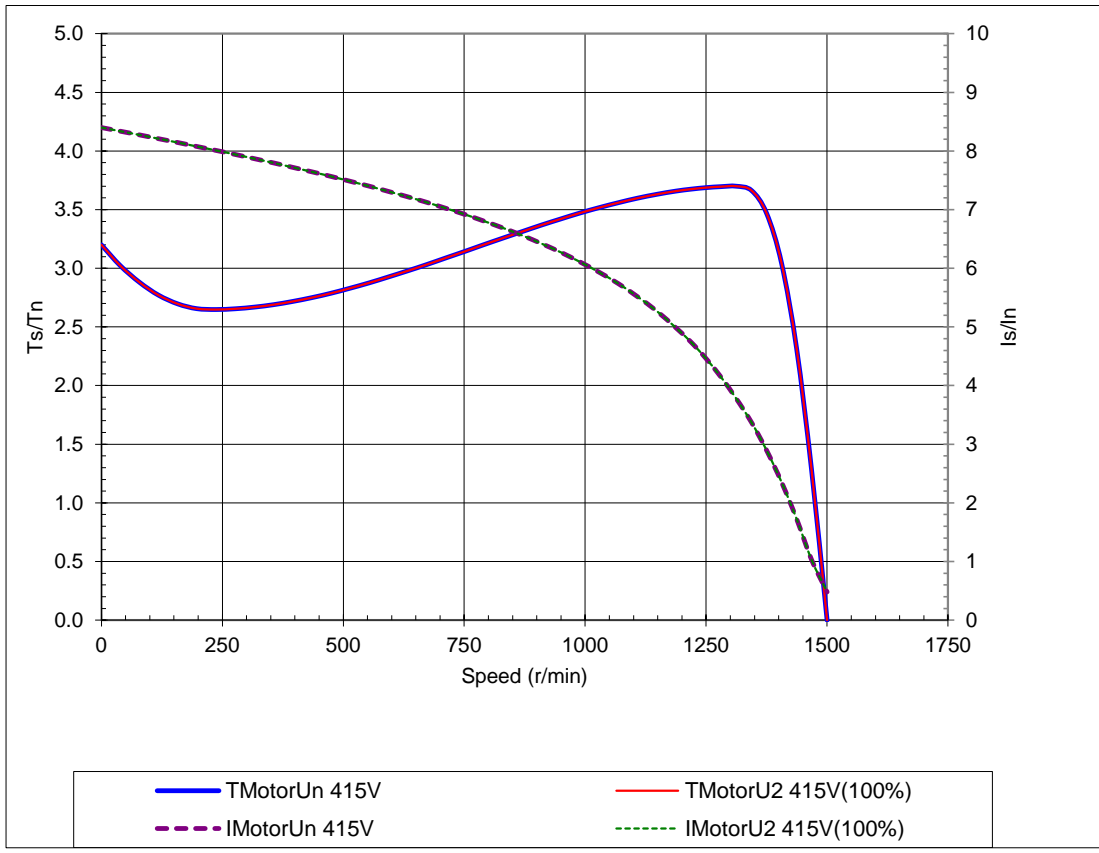


Load characteristics (IEC 60034-2-1:2007)
 Data based on situation 8/17/2012
 All data subject to tolerances in accordance with IEC

ABB Motors and Generators	Starting Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed b Date of issue	Saving ident	Pages 3(3)

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3JP 180 MLB 4	Calc. ref.	3GZF021018-29
Product code	MM18224-EX2	Frequency (Hz)	50
Rated output P _N	22 kW	Rated current I _N	41.4 A
Type of duty	S1(IEC) 100%		

J _{motor} (kgm ²)	0.23	Voltage (V) 100%	415	Voltage (V)	415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	3.2	T _{start} /T _N	3.2
Speed (r/min)	1476	Starting time (s)		Run-up time (s)	
T _N (Nm)	142	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	8.4	I _s /I _n	8.4
Nbr. of consecutive starts		T _{max} /T _n	3.7	T _{max} /T _n	3.7



Load characteristics (IEC 60034-2-1:2007)
 Data based on situation 8/17/2012
 All data subject to tolerances in accordance with IEC

ABB Motors and Generators	Technical Data Sheet - DOL			
	Project	Location		

Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident

No.	Definition	Data	Unit	Remarks
1	Product	TEFC, 3-phase, squirrel cage induction motor		
2	Product code	MM18224-EX2 (3GJP182420-ADH+332+461)		
3	Type/Frame	M3JP 180 MLB 4		
4	Mounting	IM1001, B3(foot)		
5	Rated output P _N	22	kW	
6	Service factor	1		
7	Type of duty	S1(IEC) 100%		
8	Rated voltage U _N	690	VY	± 5 % (IEC 60034-1)
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)
10	Rated speed n _N	1474	r/min	
11	Rated current I _N	24.3	A	
12	No-load current	10.7	A	
13	Starting current I _s /I _N	7.9		Fullfilled IEC 60034-12 design N,H
14	Nominal torque T _N	143	Nm	
15	Locked rotor torque T _S /T _N	2.9		
16	Maximum torque T _{max} /T _N	3.4		
17	Minimum torque T _{min} /T _N	2.5		
18	Speed at minimum torque	225	r/min	
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %
20	PLL determined from residual loss	100	24.3	92.2 / IE2
21		75	19.3	92.8
22		50	14.8	92.3
23		Start	192	0.5
24	Maximum starting time from hot	15	s	
25	Maximum starting time from cold	27	s	
26	Insulation class / Temperature class	F / B		
27	Ambient temperature	40	°C	
28	Altitude	1000	m.a.s.l.	
29	Enclosure	IP55		
30	Cooling system	IC411 self ventilated		
31	Bearing DE/NDE	6310/C3 - 6310/C3		
32	Type of Grease	Lithium based		
33	Sound pressure level (LP dB(A) 1m)	62	dB(A)	at load
34	Moment of inertia J = ¼ GD2	0.23	kg-m2	
35	Balancing	Half Key		
36	Vibration class	Grade A		
37	Position of terminal box	Top		
38	Terminal box entries; no, dimens.	2xM40x1.5 + 2xM20x1.5		
39	Number of power terminals	6		
40	Direction of rotation	CW or CCW		
41	Weight of rotor	60	kg	
42	Total weight of motor	296	kg	
43				


Ex-motors				
44	Type of protection	*Ex d IIC T4		
45				

Variant Codes / Definition

332 = Baldor catalog number
461 = Exd design, group IIC

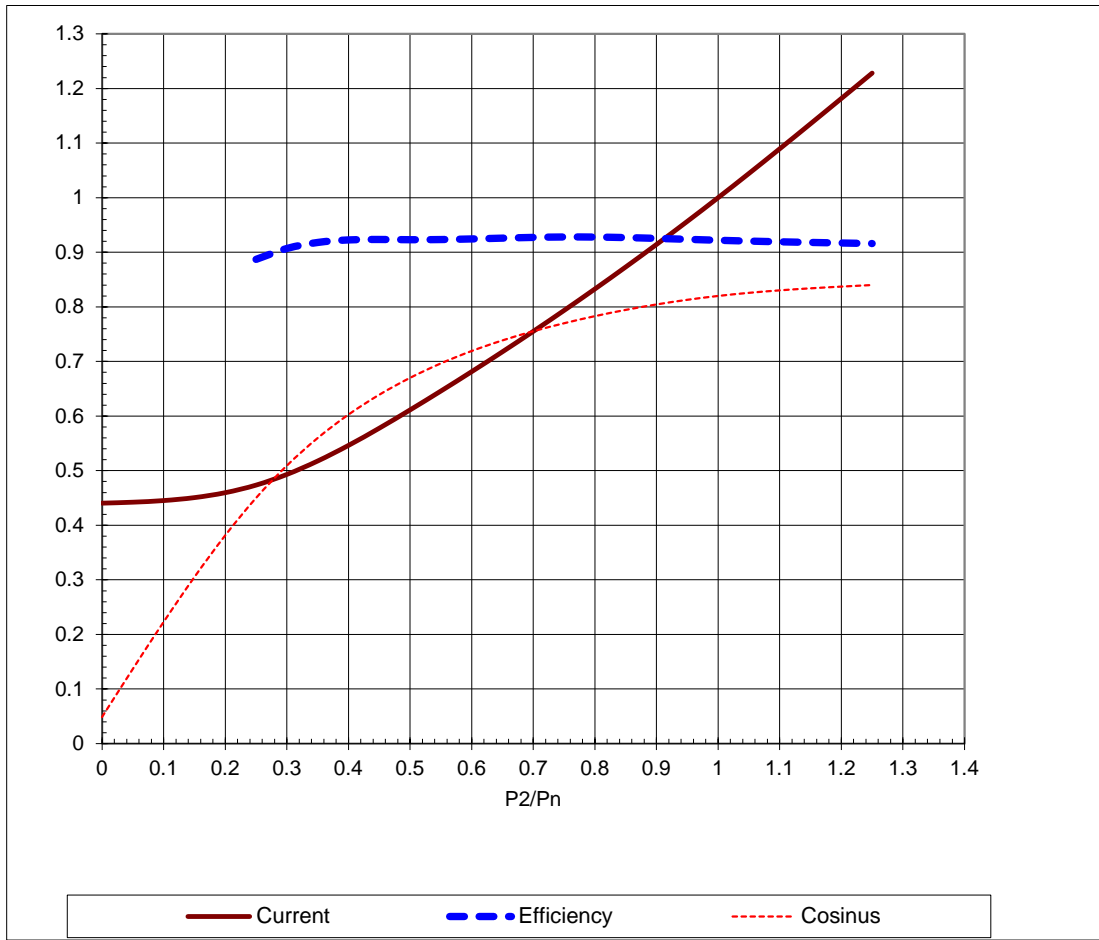
Remarks:

Data based on situation 8/17/2012
All data subject to tolerances in accordance with IEC
Guaranteed values on request
* For more information on the Atex/IECEx rating, please contact your local Baldor representative.


ABB Motors and Generators	Load Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident
			Pages 2(3)

Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3JP 180 MLB 4	Calc. ref.	3GZF021018-29
Product code	MM18224-EX2		
Rated output P _N	22	kW	
Type of duty	S1(IEC) 100%		

Voltage (V)	690	Current I _N (A)	24.3	Power factor at P _N	0.82
Frequency (Hz)	50	Speed (r/min)	1474	Efficiency (%) at P _N	92.2

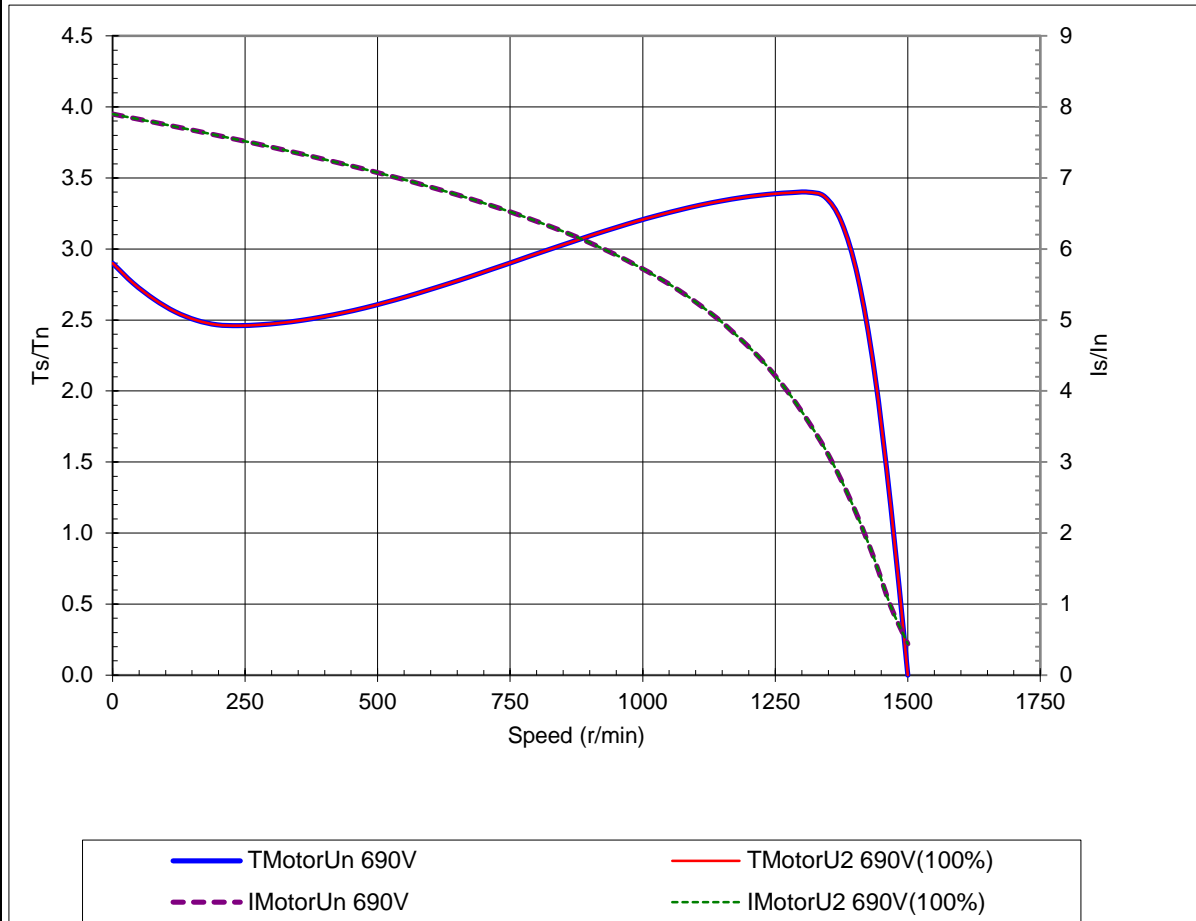


Load characteristics (IEC 60034-2-1:2007)
 Data based on situation 8/17/2012
 All data subject to tolerances in accordance with IEC

ABB Motors and Generators	Starting Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed b Date of issue	Saving ident	Pages 3(3)

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3JP 180 MLB 4	Calc. ref.	3GZF021018-29
Product code	MM18224-EX2	Frequency (Hz)	50
Rated output P _N	22 kW	Rated current I _N	24.3 A
Type of duty	S1(IEC) 100%		

J _{motor} (kgm ²)	0.23	Voltage (V) 100%	690	Voltage (V)	690V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.9	T _{start} /T _N	2.9
Speed (r/min)	1474	Starting time (s)		Run-up time (s)	
T _N (Nm)	143	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	7.9	I _s /I _n	7.9
Nbr. of consecutive starts		T _{max} /T _n	3.4	T _{max} /T _n	3.4



Load characteristics (IEC 60034-2-1:2007)
 Data based on situation 8/17/2012
 All data subject to tolerances in accordance with IEC