

ABB BALDOR RELIANCE III

Customer information packet

ZDVSCP3774T

10HP, 1760RPM, 3PH, 60HZ, 215TC, 0748M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	12.500 A @ 460.0 V 25.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	RESOLVER
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	No Key Or Flat
Heater Indicator	No Heater
High Voltage Full Load Amps	12.5 a

Part Detail

Revision	P
Type	AC
Mech. spec.	07M294
Base	
Status	PRD/A
Elec. spec.	07WGX776
Layout	07LYM294
Eff. date	09-30-2025
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	09-05-2012

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4500 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.03 IN
Power Factor	82
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3949				
CAT.NO.	ZDVSCP3774T			
SPEC.	07M294X776Z1			
FRAME	215TC	H.P.		10 TE
VOLTS	230/460			
MAG. CUR.	10.2/5.1		F.L. AMPS	25/12.5
R.P.M.	1760	R.P.M. MAX		4500
HZ.	60	PH.	3	CLASS F
SER.F.	1.00	SL HZ	1.3	
NEMA NOM. EFF.	92.4	WK2	1.18	
RATING	40C AMB-CONT			
DE	6307	ODE	6206	
CC	010A	SN		
	1.5:1 CHP PWM			
	1000:1 CT/VT			

REL S.O.	ZDVSCP3774T	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	215TC	AMPS	12.5	MAX SAFE RPM	6000	(AT BASE RATING, 25 ⁰ C)			
HP	10	DUTY	CONT	In (AMPS)	5.1	R1	0.5070	X1	1.9720
BASE SPEED	1760	S.F.	1.0	P.F. @NL/FL	4/82	R2	0.3420	X2	1.5800
PHASE/HZ	3/60	AMB ⁰ C/INSUL	40/F	WK ² (lb-ft ²)	1.18			XM	48.3000

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1762	10.0	29.80	460	60	12.30
Max Speed	2655	10.1	20.05	460	90	11.98
Min Speed	0	0.0	29.00	29.70	1.27	12.30

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.00	460	60	5.10
1/4	1790	2.5	7.29	460	60	5.84
1/2	1781	5.0	14.70	460	60	7.52
3/4	1771	7.5	22.30	460	60	9.75
Full Load	1762	10.0	29.80	460	60	12.30
O/L	1740	17.2	51.80	460	60	20.75

Blower Data

Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty



DR BY Michael Williamson
CK BY Michael Williamson
APP BY Michael Williamson
DATE 2/4/2016

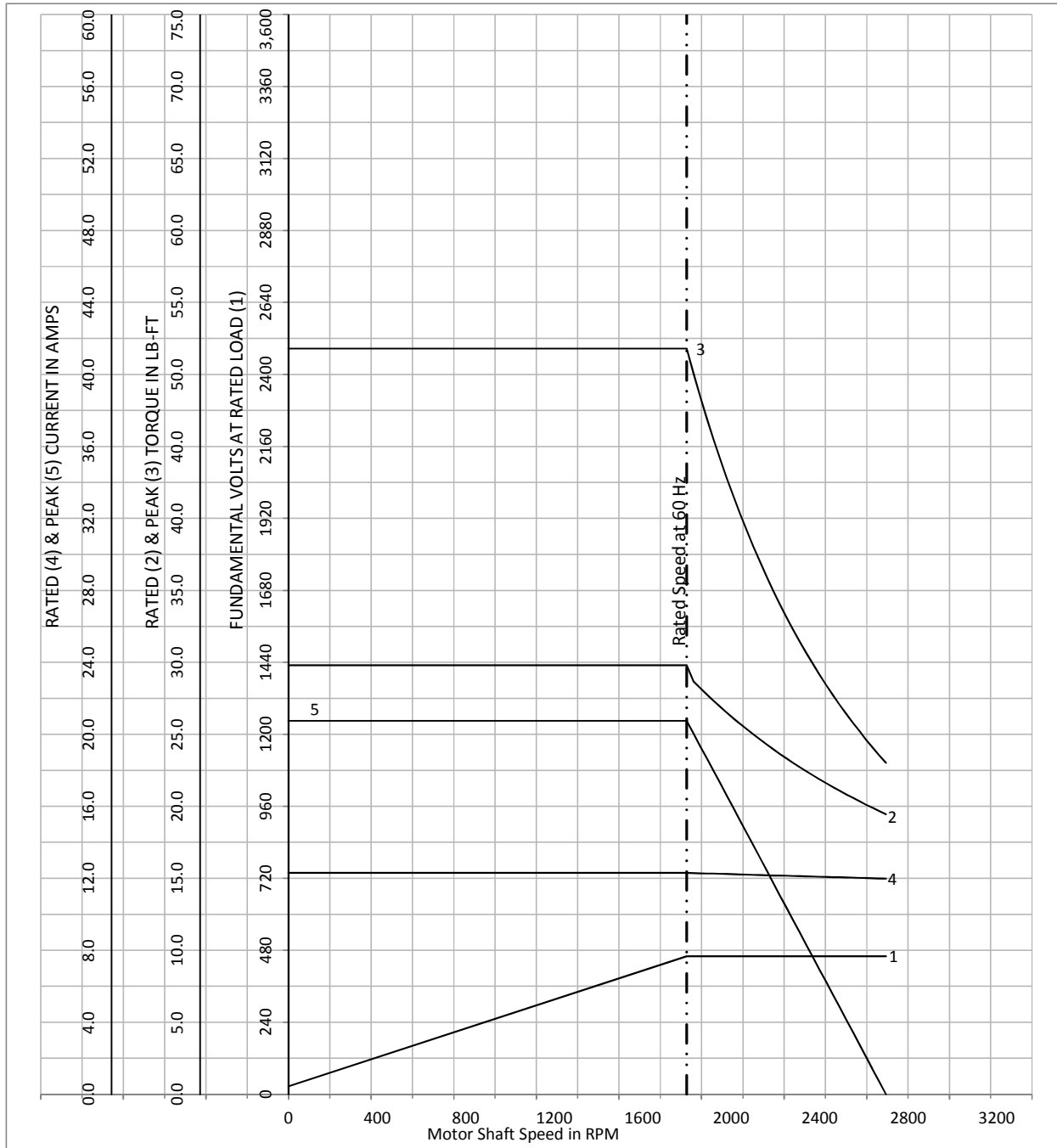
**A-C MOTOR
PERFORMANCE CURVES**

07M294X776Z1

ISSUE DATE 2/4/2016

REL S.O.	ZDVSCP3774T	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	215TC	AMPS	12.5	MAX SAFE RPM	6000	(AT BASE RATING, 25 ⁰ C)			
HP	10	DUTY	CONT	In (AMPS)	5.1	R1	0.5070	X1	1.9720
BASE SPEED	1760	S.F.	1.00	P.F. @NL/FL	4/82	R2	0.3420	X2	1.5800
PHASE/HZ	3/60	AMB ⁰ C/INSUL	40/F	WK ² (lb-ft ²)	1.18			XM	48.3000

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

BALDOR
A MEMBER OF THE ABB GROUP

DR BY Michael Williamson
CK BY Michael Williamson
APP BY Michael Williamson
DATE 2/4/2016

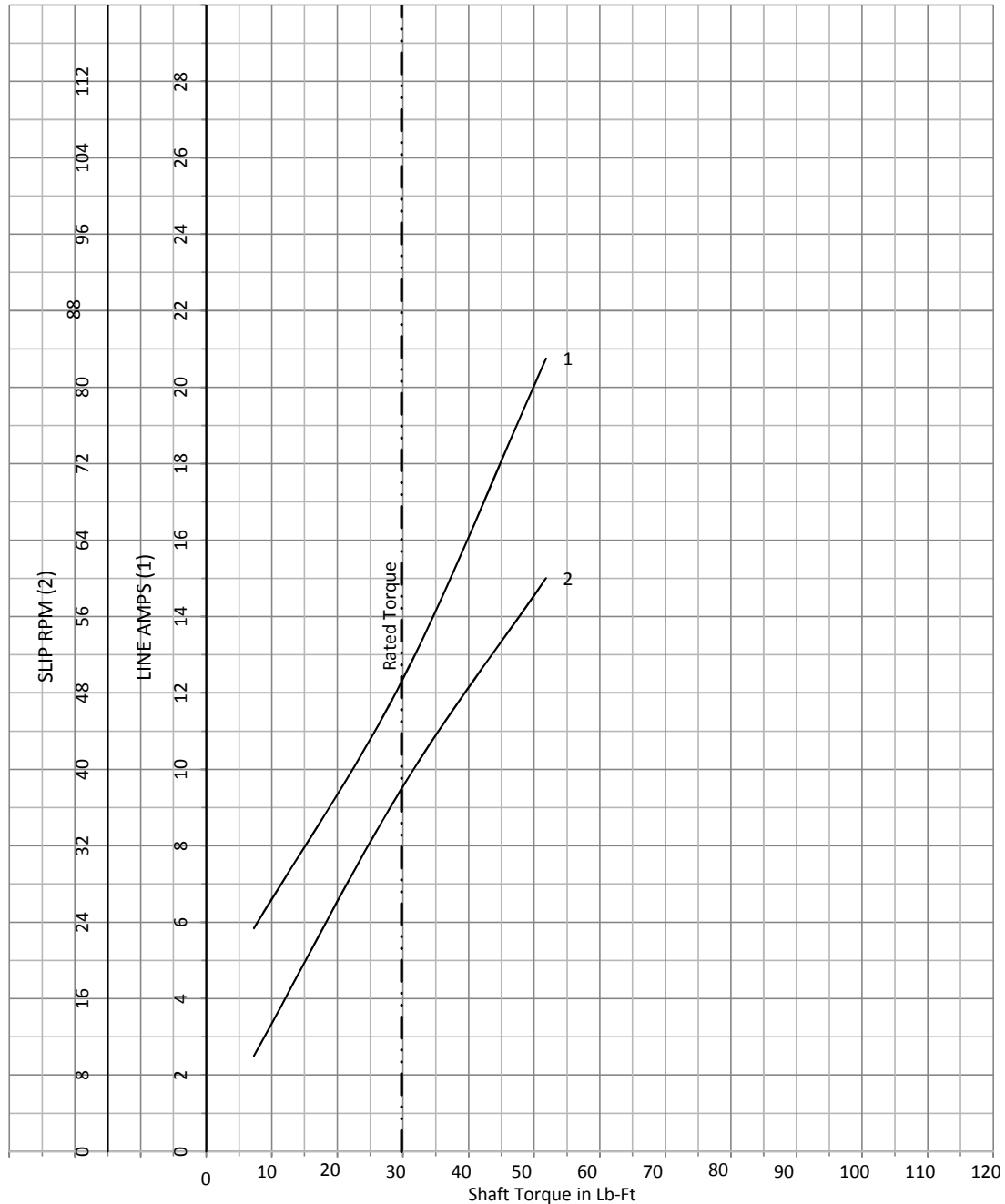
**A-C MOTOR PERFORMANCE
CURVES**

07M294X776Z1

SH 1 of 2
ISSUE DATE 2/4/2016

REL S.O.	ZDVSCP3774T	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	215TC	AMPS	12.5	MAX SAFE RPM	6000	(AT BASE RATING, 25 ⁰ C)			
HP	10	DUTY	CONT	In (AMPS)	5.1	R1	0.5070	X1	1.9720
BASE SPEED	1760	S.F.	1.00	P.F. @NL/FL	4/82	R2	0.3420	X2	1.5800
PHASE/HZ	3/60	AMB ⁰ C/INSUL	40/F	WK ² (Lb-Ft ²)	1.18			XM	48.3000

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only



DR BY Michael Williamson
CK BY Michael Williamson
APP BY Michael Williamson
DATE 2/4/2016

**A-C MOTOR PERFORMANCE
CURVES**

07M294X776Z1

SH 2 of 2
ISSUE DATE 2/4/2016



