

BALDOR® • RELIANCE 

Product Information Packet

M1228T

20/8.9HP, 1760/1160RPM, 3PH, 60HZ, 286T, 4046

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX174	CD Diagram:	CD0013	Mfg Plant:	
Mech. Spec:	40D101	Layout:	40LYD101	Poles:	04/06	Created Date:	02-12-2010
Base:	RG	Eff. Date:	09-07-2017	Leads:	6#10		

Specs			
Catalog Number:	M1228T	Inverter Code:	Not Inverter
Enclosure:	OPSB	KVA Code:	H
Frame:	286T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	20.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 10 AWG
	8.900 HP @ 60 HZ	Motor Lead Exit:	Ko Box
Synchronous Speed @ Frequency:	1200 RPM @ 60 HZ	Motor Lead Termination:	Flying Leads
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Type:	4046M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	24.000 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding
Design Code:	A	Shaft Rotation:	Reversible
Drip Cover:	No Drip Cover	Shaft Slinger Indicator:	No Slinger

Duty Rating:	CONT	Speed Code:	2S-2W-VT
Electrically Isolated Bearing:	Not Electrically Isolated	Motor Standards:	NEMA
Feedback Device:	NO FEEDBACK	Starting Method:	Direct on line
Front Face Code:	Standard	Thermal Device - Bearing:	None
Front Shaft Indicator:	None	Thermal Device - Winding:	None
Heater Indicator:	No Heater	Vibration Sensor Indicator:	No Vibration Sensor
Insulation Class:	F	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP1256L										
CAT.NO.	M1228T									
SPEC.	40D101X174									
HP	20/8.9									
VOLTS	460									
AMP	24/18									
RPM	1760/1160									
FRAME	286T				HZ	60			PH	3
SER.F.	1.15		CODE	H	DES	A		CLASS	F	
NEMA-NOM-EFF			PF							
RATING	40C AMB-CONT									
CC									USABLE AT 208V	
DE	6311			ODE	6309					
ENCL	OPSB		SN							

Parts List		
Part Number	Description	Quantity
SA191373	SA 40D101X174	1.000 EA
RA179033	RA 40D101X174	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
40EP3200A02	STD FREP OPEN 309 BRG	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
40EP3200B05	STD PUEP OPEN 311 BRG	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB

Parts List (continued)		
Part Number	Description	Quantity
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.070 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
HA3154A03	STUD, 3/8-16 X 17.75	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0013	CONNECTION LABEL	1.000 EA
NP1256L	ALUM UL CSA CC INDUSTRIAL MOTOR A60	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

Accessories		
Part Number	Description	Multiplier
40-1400	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 30415 - Typical performance - not guaranteed values

Winding: 40WGX174-R001	Type: 4046M	Enclosure: OPEN
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Nameplate Data				460 V, 60 Hz: High Speed Connection	
Rated Output (HP)	20/8.9			Full Load Torque	59.4 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	24/18			Breakdown Torque	209 LB-FT
R.P.M.	1760/1160			Pull-up Torque	100 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	141 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	169 A
Service Factor (S.F.)	1.15			No-load Current	8.13 A
NEMA Nom. Eff.	0	Power Factor	0	Line-line Res. @ 25°C	0.678 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	39°C
S.F. Amps				Temp. Rise @ S.F. Load	48°C

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	75	83	86	87	88	87
Efficiency	80.1	87.9	90	90.5	89.8	89.1	90.1
Speed	1794	1789	1784	1779	1772	1765	1775
Line amperes	10.5	14.3	19	24.1	30.2	35.9	27.8

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

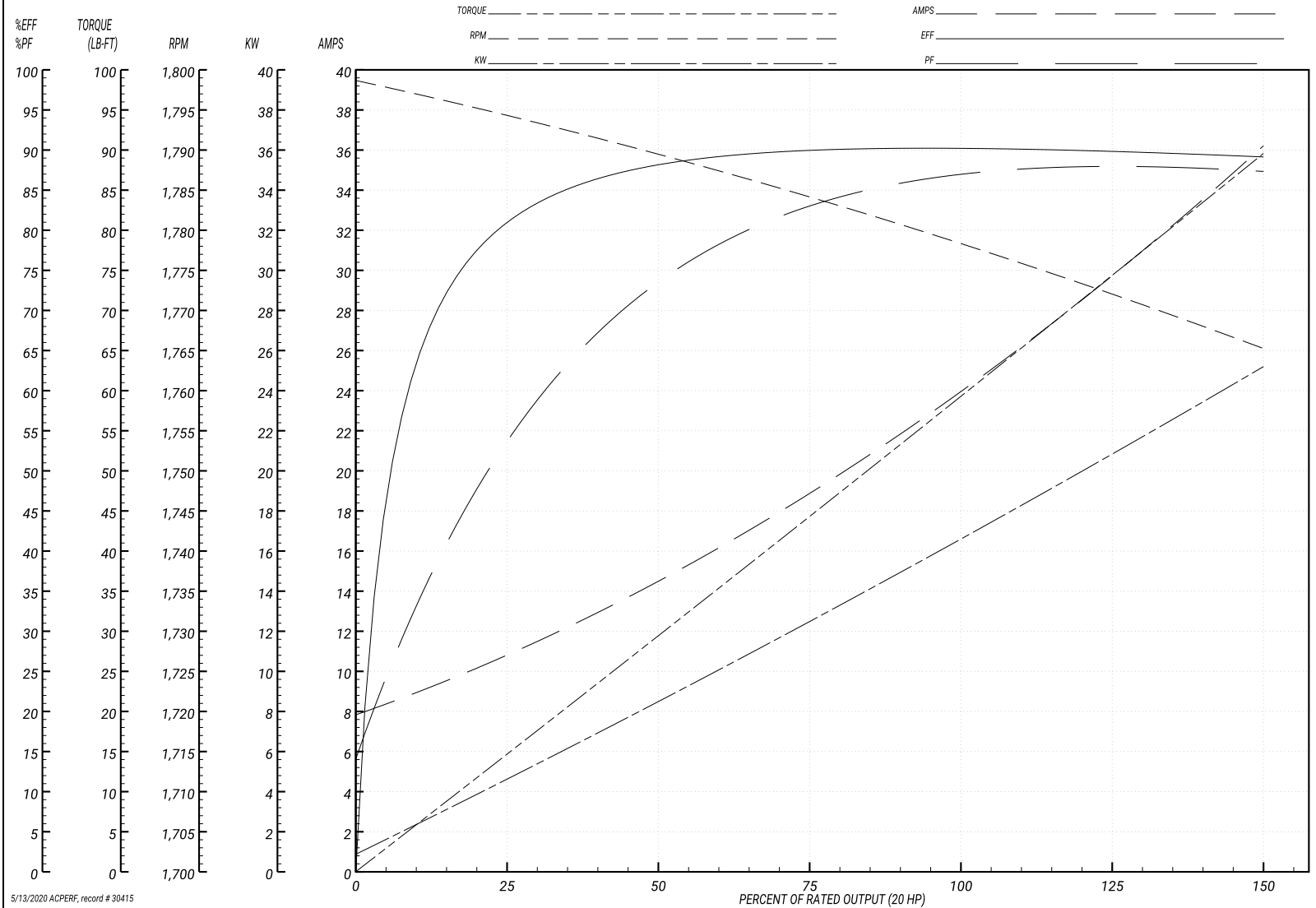
ABB Motors and Mechanical Inc.

WINDING # 40WGx174

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1779 RPM 460 V 4046M

TORQUES(LB-FT): PO=209 PU=100 LR=141 LRA=169



5/13/2020 ACPERF, record # 30415

AC Induction Motor Performance Data

Record # 30416 - Typical performance - not guaranteed values

Winding: 40WGX174-R001	Type: 4046M	Enclosure: OPEN
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Nameplate Data				460 V, 60 Hz: Low Speed Connection	
Rated Output (HP)	20/8.9			Full Load Torque	39.8 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	24/18			Breakdown Torque	172 LB-FT
R.P.M.	1760/1160			Pull-up Torque	54.6 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	81.1 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	102 A
Service Factor (S.F.)	1.15			No-load Current	13.4 A
NEMA Nom. Eff.	0	Power Factor	0	Line-line Res. @ 25°C	0.959 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	50°C
S.F. Amps				Temp. Rise @ S.F. Load	55°C

Load Characteristics 460 V, 60 Hz, 8.9 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	23	37	47	55	62	66	59
Efficiency	66.8	78.8	84	85.2	87	87.8	86.3
Speed	1198	1196	1194	1191	1189	1187	1190
Line amperes	14	14.9	16.2	17.9	19.8	21.9	19

Performance Graph at 460V, 60Hz, 8.9HP Typical performance - Not guaranteed values

