

BALDOR® • RELIANCE 

Product Information Packet

ECP4106T

20HP,3540RPM,3PH,60HZ,256T,0944M,TEFC,F1

Part Detail							
Revision:	AS	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGY799	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	09J371	Layout:	09LYJ371	Poles:	02	Created Date:	08-29-2010
Base:	RG	Eff. Date:	04-05-2022	Leads:	9#12		

Specs			
Catalog Number:	ECP4106T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	256T	Inverter Code:	Inverter Duty
Frame Material:	Iron	KVA Code:	J
Output @ Frequency:	20.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 12 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	CLI GP A,B,C,D	Motor Lead Termination:	Flying Leads
XP Division:	Division II	Motor Type:	0944M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	92
	CSA	Product Family:	Super-E Chemical Processing
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

Constant Torque Speed Range:	6	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	22.000 A @ 460.0 V	Shaft Rotation:	Reversible
	44.000 A @ 230.0 V	Shaft Slinger Indicator:	Shaft Slinger
	48.000 A @ 208.0 V	Speed Code:	Single Speed
Design Code:	A	Motor Standards:	NEMA
Drip Cover:	No Drip Cover	Starting Method:	Direct on line
Duty Rating:	CONT	Thermal Device - Bearing:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Winding:	None
Feedback Device:	NO FEEDBACK	Vibration Sensor Indicator:	No Vibration Sensor
Front Face Code:	Standard	Winding Thermal 1:	None
Front Shaft Indicator:	None	Winding Thermal 2:	None
		XP Temp Code:	T3

Nameplate NP3995ABEL													
CAT # ECP4106T			SER			CC 010A							
SPEC 09J371Y799G1			RATING 40C AMB-CONT										
HZ	VOLTS	AMPS		RPM	HP	CODE	SF	DES	PF	NEMA NOM. EFF			
60	230/460	44/22		3540	20	J	1.15	A	92 %	91.7 %			
									%				
PH 3	CL F	MAX RPM 5400	MAX CORR KVAR 6.61	USABLE AT 208V 48									
IP55	FR 256T	ENCL TEFC	DE BRG 6309	ODE BRG 6309									
GREASE POLYREX EM					MTR WT 324	LBS							
USABLE AT 50HZ 15HP 190/380V 40.8/20.4A					SF1.0								
CL I DIV 2 GRPS A,B,C,D			CL I ZONE 2 GRPS			IIA,IIB,IIC			TEMP T 200	C			
1.0 SF ON PWM INVERTER			POWER	INV TEMP CL 200		C							
CHP 60-90	HZ 1.5:1	CT 6-60	HZ 10:1	VT 3-60	HZ 20:1								
SPACE HEATER LEADS H1-H2:			TIE LIKE NUMBERS			TOGETHER							
V	A	W	MAX SPACE HEATER TEMP										

Parts List		
Part Number	Description	Quantity
SA202236	SA 09J371Y799G1	1.000 EA
RA189518	RA 09J371Y799G1	1.000 EA
37FN3002C02	EXFN, PLASTIC, 6.00 OD, 1.503 ID	1.000 EA
09CB1002A12P	KOBX W/1.25 NPT LEAD HOLE & 2.38 MTG HOL	1.000 EA
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
10XN2520K08	1/4-20 X .50 GRADE #5, STL, ZINC PLATE	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 EA
HA3400A39	STUD- 3/8-16 X 6.44 OAL HEX	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
HA4017A08	.125X3.50 GREASER EXTEN.	1.000 EA
HA4017A02	.125X2.50 GREASER EXTENS.F/S	1.000 EA
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
09FH1000P	FAN COVER, CAST W/EPOXY PRIMER	1.000 EA
09EP1118A38P	PUEP MACH,309 BRG,PLS GRSR,RLF,EPOXY PRI	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
12CB1503P	CONDUIT BOX LID, CAST W/EPOXY PRIMER	1.000 EA
12GS1002	GASKET, CONDUIT BOX LID, NEOP	1.000 EA
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 QT
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.033 EA
09EP1118A37LP5	FREP MACH, 309 BRG. EPOXY PRIMER	1.000 EA
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
NP3995ABEL	SS SUPER-E SD XEX CLI DIV2 UR CSA-C-US E	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.080 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA

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HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.050 GA
40PA1005	PACKAGING GROUP, 09 STD	1.000 EA
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 EA

AC Induction Motor Performance Data

Record # 47264

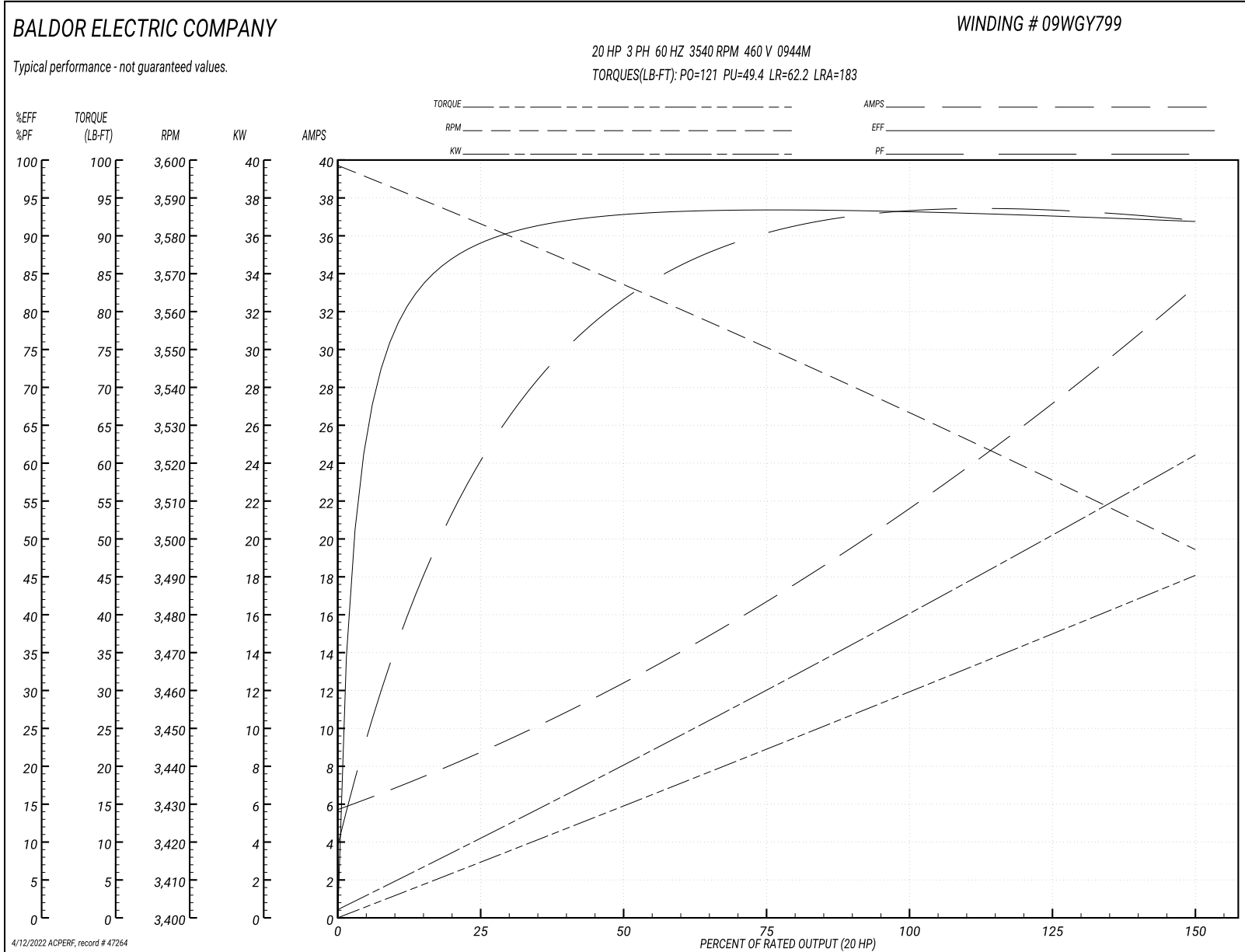
Typical performance - not guaranteed values

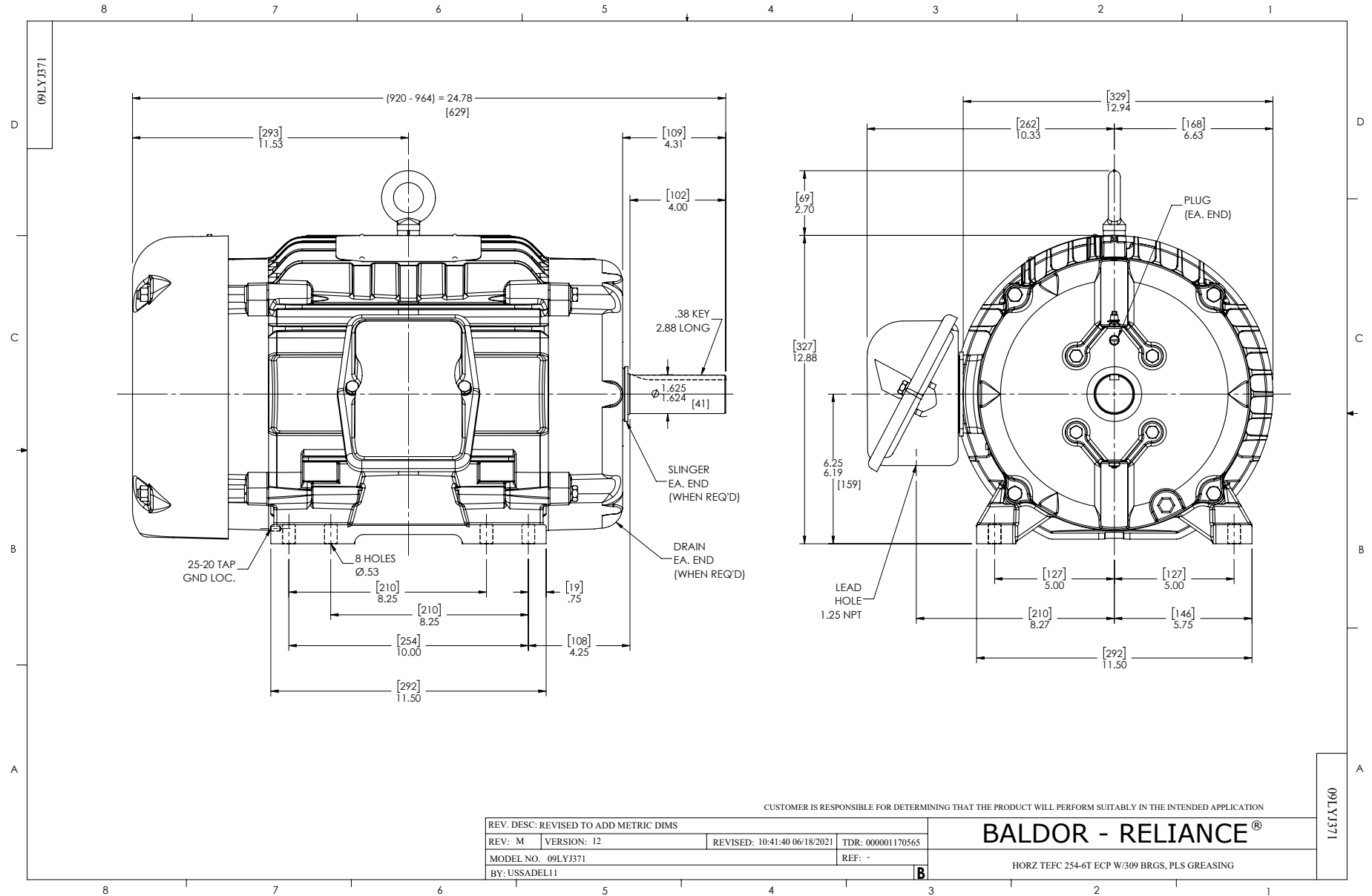
Winding: 09WGY799-R020		Type: 0944M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	29.76 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	44/22	Breakdown Torque	121 LB-FT		
R.P.M.	3540	Pull-up Torque	49.4 LB-FT		
Hz	60 Phase	Locked-rotor Torque	62.2 LB-FT		
NEMA Design Code	A KVA Code	Starting Current	183 A		
Service Factor (S.F.)	1.15	No-load Current	6.12 A		
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	0.377 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	62°C		
S.F. Amps		Temp. Rise @ S.F. Load	76°C		
		Locked-rotor Power Factor	27.8		
		Rotor inertia	1.12 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	83	90	92	93	93	93
Efficiency	88.7	92.8	93.2	93.2	92.6	91.8	92.8
Speed	3583	3567	3551	3534	3516	3497	3523
Line amperes	8.14	12.12	16.69	21.89	27.18	33.06	25.1

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





CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007		
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MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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