ABB BALDOR RELIANCE

Customer information packet

ECP3770T-4

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 0738M, TEFC, F
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV
	NEMA PREMIUM
	NEMA_PREMIUM
	UR
	CCSA US
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
Constant Torque Speed Range	1
Current @ Voltage	9.500 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AF
Type	AC
Mech. spec.	07K374
Base	
Status	PRD/A
Elec. spec.	07WGX578
Layout	07LYK374
Eff. date	10-01-2025
CD Diagram	CD0006
Poles	04
Leads	3#14 Y
Proprietary	False
Created date	08-19-2006

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.50 IN
Power Factor	81
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
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	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line

Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3257								
CAT.NO.	ECP3770T-4							
SPEC.	07K374X578G1							
HP	7.5 TE							
VOLTS	460							
AMP	9.5							
RPM	1770							
FRAME	213T	**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	J	**DES**	A	**CL**	F	
RATING	40C AMB-CONT							
SN								
DE	6307	**ODE**	6307					
NEMA-NOM-EFF	91.7	**PF**	81					
G.MIN.EFF	90.2	**CC**	010A					
T. CODE	T3C	**T=**	160					

NP3260					
SPEC.	07K374X578G1				
D.E. BRG.	35BC03XP30X				
O.D.E. BRG.	35BC03XP30X				
GREASE	POLYREX EM				
RPM MAX	2700	**MAX. KVAR**	1.4		
BLANK					
INV.TYPE	PWM				
T=	160				
C HP FR	60	**C HP TO**	90		
CT HZ FROM	1	**CT HZ TO**	60		
VT HZ FROM	0-	**VT HZ TO**	60		
HTR-VOLTS		**HTR-AMPS**			
HTR-WATTS		**MAX. SPACE HEATER TEMP.**			

Parts List

Part number	Description	Quantity
SA147548	SA 07K374X578G1	1.000 ea
RA136589	RA 07K374X578G1	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
09CB1001A03G	CONDUIT BOX, MACH GRAY	1.000 ea
RM1017	LEAD SEPERATOR GASKET MODEL 307 1/8" THK	1.000 ea
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
37EP1101C43G	TEFC 307 BRG, GRSR,RELIEF,.25-20 FH TAPS	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
37EP1101A32G	PU ENDPLATE MACH	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
07FH1001A01G	SPL FAN HOUSING, 307, W/GREASER, GRAY EP	1.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	3.000 ea
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
09CB1504A01G	LIPPED CONDUIT BOX LID, MACH GRAY EPOXY	1.000 ea
09GS1001A01	GASKET, BOX LID, 1/8 THICK BLACK NEOPREN	1.000 ea
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea

HA1005A07	SLINGER, OD 2.25, ID 1.344, 307 BRG	1.000 ea
HW4600B33	V-RING SLINGER 1.375 X 1.890 X .35 VITON	1.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 ea
MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN 8	0.036 ga
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3257	SS CP SUPER-E DIV-2 UL CSA-C US EEV PREM	1.000 ea
NP3260	SS CP SUPER-E AUX DATA INFORMATION	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data
Record # 47030
Typical performance - not guaranteed values

Winding: 07WGX578-R066	**Type:** 0738M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			7.5	**Full Load Torque**	22.2 LB-FT
Volts			460	**Start Configuration**	direct on line
Full Load Amps			9.5	**Breakdown Torque**	70.9 LB-FT
R.P.M.			1770	**Pull-up Torque**	32.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	43 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	70.8 A
Service Factor (S.F.)			1.15	**No-load Current**	4.3 A
NEMA Nom. Eff.	91.7	**Power Factor**	81	**Line-line Res. @ 25ºC**	1.41 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	41°C
S.F. Amps				**Temp. Rise @ S.F. Load**	50°C
				Locked-rotor Power Factor	37.2
				Rotor inertia	0.934 LB-FT2

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	42	64	75	80	83	84	82
Efficiency	87.5	91.6	92.5	92	91.1	90.1	91.5
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9	10.7

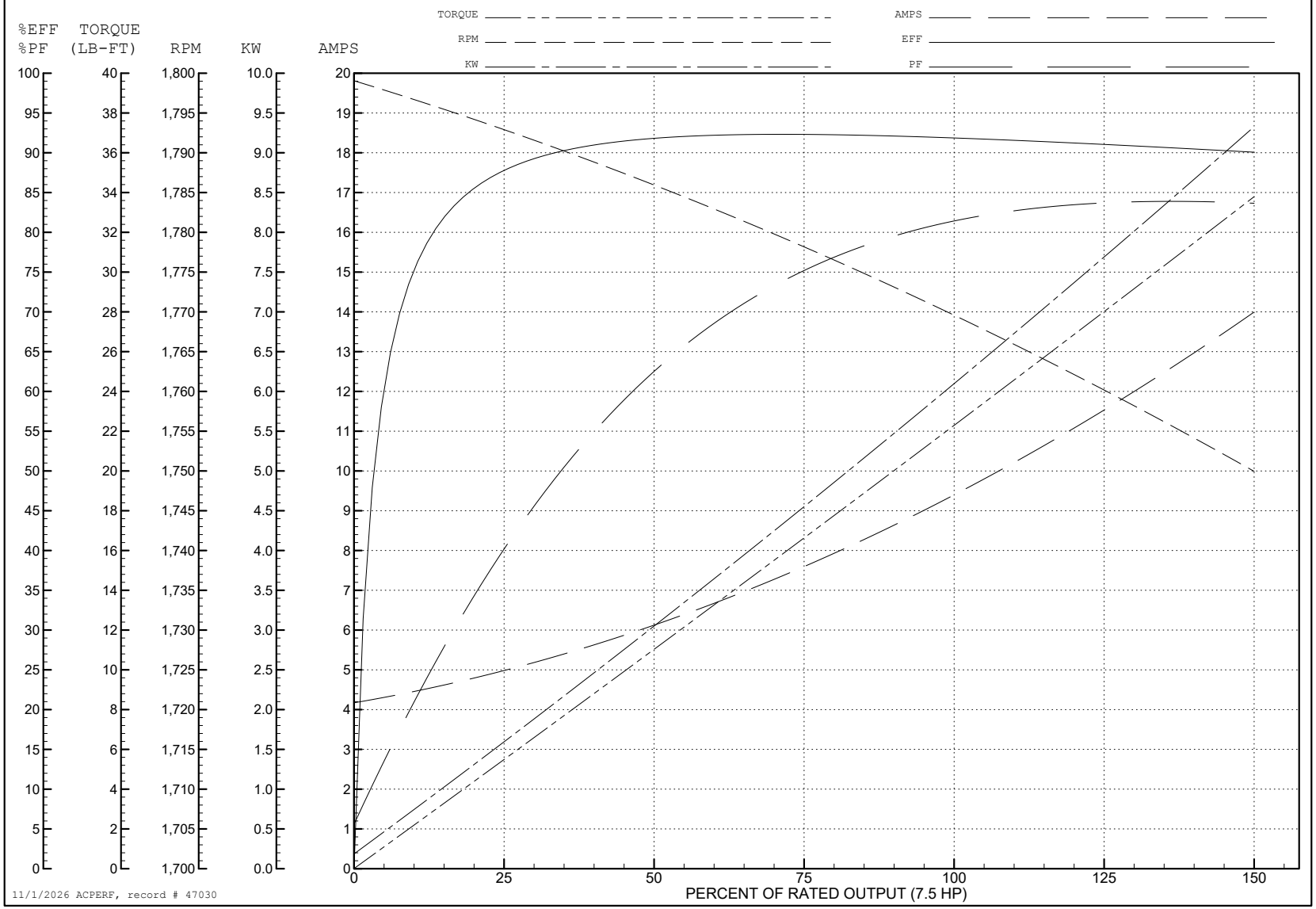
ABB Motors and Mechanical Inc.

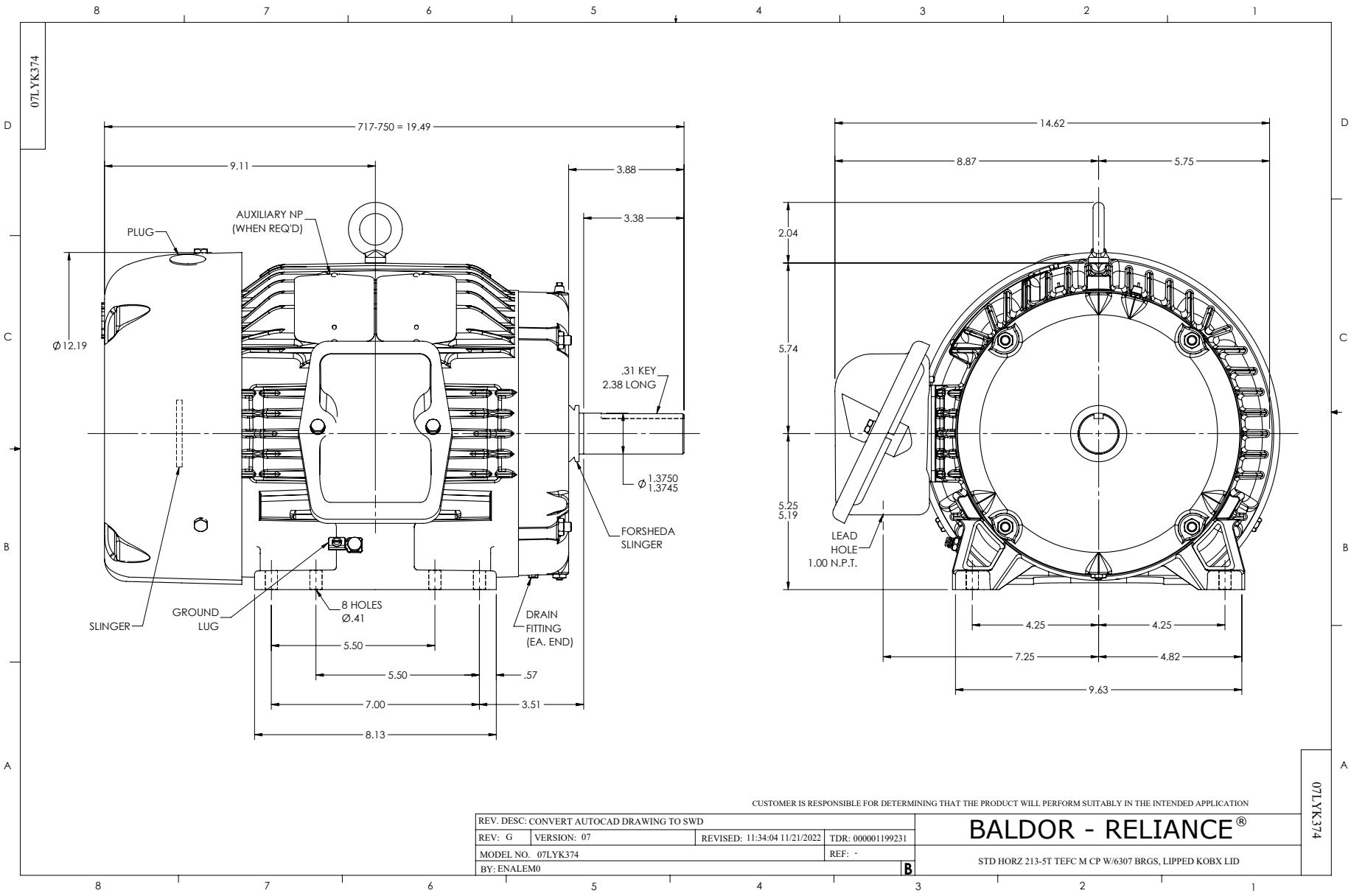
WINDING # 07WGX578

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

Typical performance - not guaranteed values.

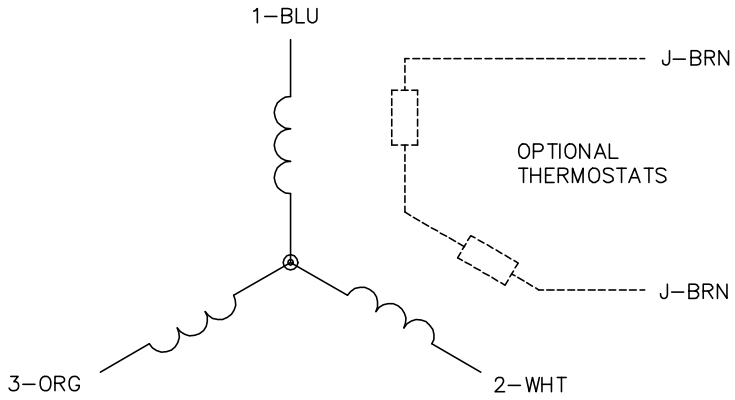
TORQUES(LB-FT): PO=70.9 PU=32.7 LR=43 LRA=70.8

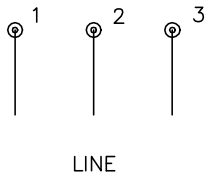



07LYK374
717-750 = 19.49
9.11
3.88
3.38
AUXILIARY NP
(WHEN REQ'D)
PLUG
Ø12.19
.31 KEY
2.38 LONG
Ø 1.3750
1.3745
FORSHEDA
SLINGER
SLINGER
GROUND
LUG
8 HOLES
Ø.41
DRAIN
FITTING
(EA. END)
5.50
5.50
.57
7.00
3.51
8.13
14.62
8.87
5.75
2.04
5.74
5.25
5.19
LEAD
HOLE
1.00 N.P.T.
4.25
4.25
7.25
4.82
9.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRAWING TO SWD
REV: G
VERSION: 07
REVISED: 11:34:04 11/21/2022
TDR: 000001199231
MODEL NO. 07LYK374
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
STD HORZ 213-5T TEFC M CP W/6307 BRGS, LIPPED KOBX LID
07LYK374

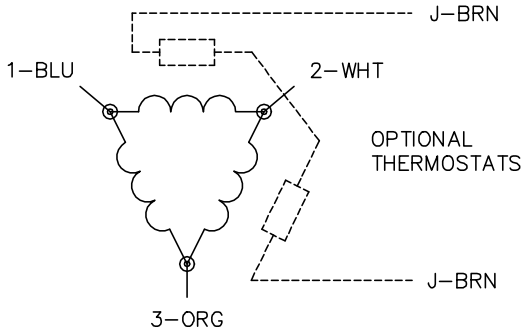
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1