

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **IDDRPM21504**

**50HP,1760RPM,3PH,N/AHZ,2168,DPG-FV,**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L1757A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617206-001	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	IDDRPM21504		
Enclosure:	DP		
Frame:	RL2168		
Frame Material:	Exposed Laminations		
Output @ Frequency:	50.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
Agency Approvals:	CCSA US		
	UR		
Auxillary Box:	No Auxillary Box		
Base Indicator:	Rigid		
Bearing Grease Type:	No Grease		
Current @ Voltage:	62.000 A @ 460.0 V		
Duty Rating:	CONT		
Enclosure Modification:	FORCE VENT		
Feedback Device:	NO FEEDBACK		
Frame Prefix:	RL		
Heater Indicator:	No Heater		

<b>Insulation Class:</b>	H		
<b>Mounting Arrangement:</b>	F1		
<b>Product Family:</b>	General Industrial		
<b>Pulley End Bearing Type:</b>	Ball		
<b>Pulley Face Code:</b>	Standard		
<b>Shaft Ground Indicator:</b>	No Shaft Grounding		
<b>Shaft Rotation:</b>	Reversible		
<b>Motor Standards:</b>	NEMA		
<b>Thermal Device - Bearing:</b>	None		
<b>Thermal Device - Winding:</b>	Normally Closed Thermostat		

		DUTY	HP	RPM	AMPS	VOLTS	HZ		
	CONT		50	1760	62	460	60		
	CONT		50	2010	61	460	68.6		
	CONT		50	2400	60	460	82.4		
CAT.NO.	IDDRPM21504			SPEC. NO.	P21R0254				
SER.NO.				FR	RL 2168	INSUL	H		
PH.	3	MAX SAFE SPEED			5000	AMB.	40	MIN. AMB. 0	
DESIGN NO.	L1757A			TYPE					
S.F.	1.00			D.E. BRG.	50BC03JPP30A				
ENCL MOD	FORCE VENT			O.D.E. BRG.	45BC02JPP30A				

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE	CONN EQ	CKT OHMS	PER PHASE
FRAME	RL2168	AMPS	62	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	R1	.106	X1
HP	50	DUTY	CONT	IM (AMPS)	23	R2	.0797	X2	.508
BASE SPEED	1760	S.F.	1.0	P.F. @NL/FL	.083/.857	X2			.514
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK <sup>2</sup> (lb-ft <sup>2</sup> )	2.32	X1			11.8


**RATED FULL LOAD DATA**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1756	50.0	150	460	60	61.8
MAX SPEED	2408	50.0	109	460	82.4	60.0
MIN SPEED	0	0	0	20.0	1.49	62.0

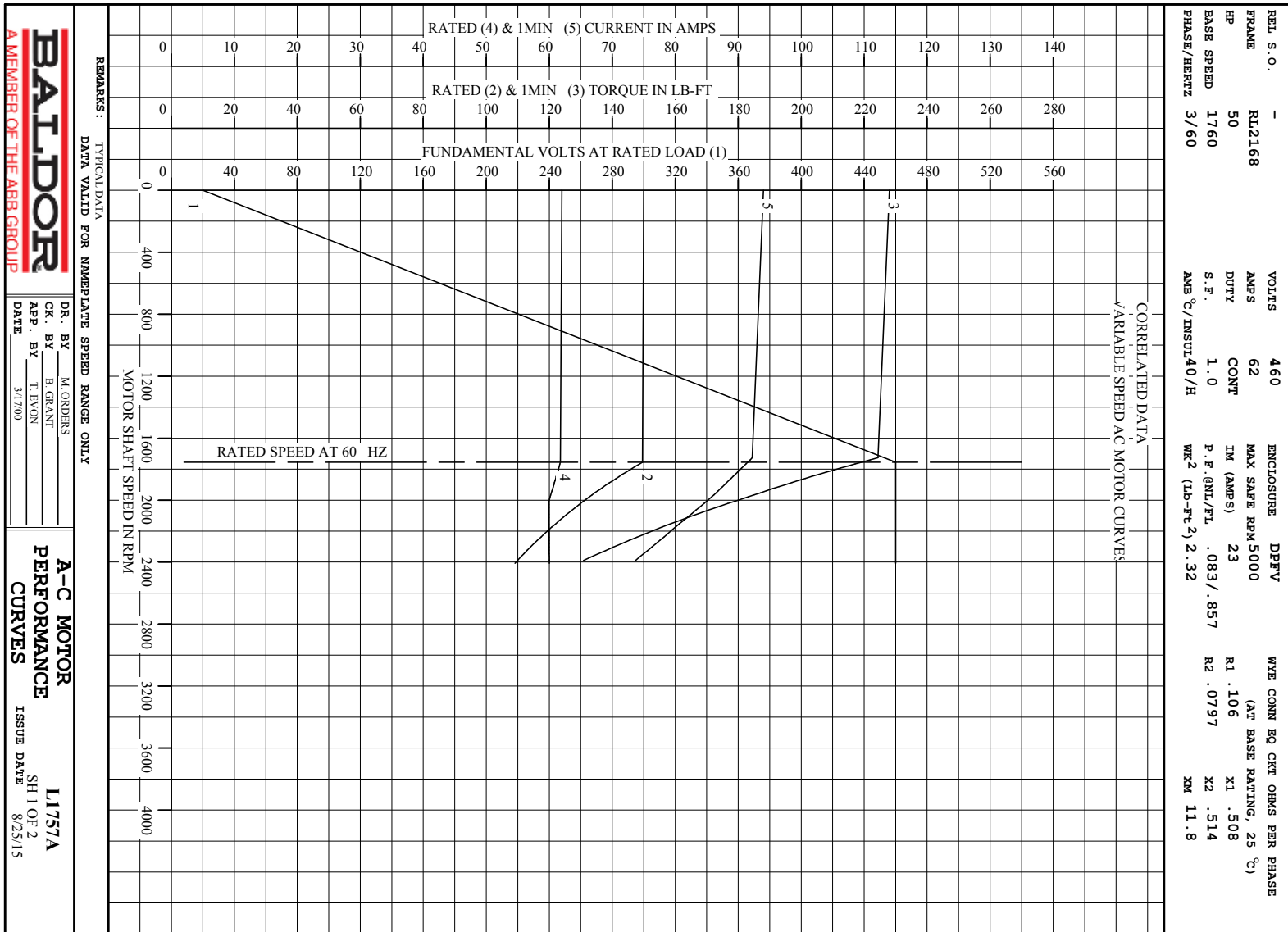
**LOAD PERFORMANCE AT BASE SPEED**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	22.6
1/4	1790	12.5	37	460	60	27.2
1/2	1779	25.0	74	460	60	36.4
3/4	1768	37.5	111	460	60	48.2
FULL LOAD	1756	50.0	150	460	60	61.8
O/L	1727	73.8	224	460	60	92.2

REMARKS: TYPICAL DATA  
CORRELATED DATA

 <p><b>A MEMBER OF THE ABB GROUP</b></p>	DR. BY	M. ORDERS	<p><b>A-C MOTOR</b></p> <p><b>PERFORMANCE</b></p> <p><b>DATA</b></p>
	CR. BY	B. GRANT	
	APP. BY	T. EVON	
	DATE	3/17/00	

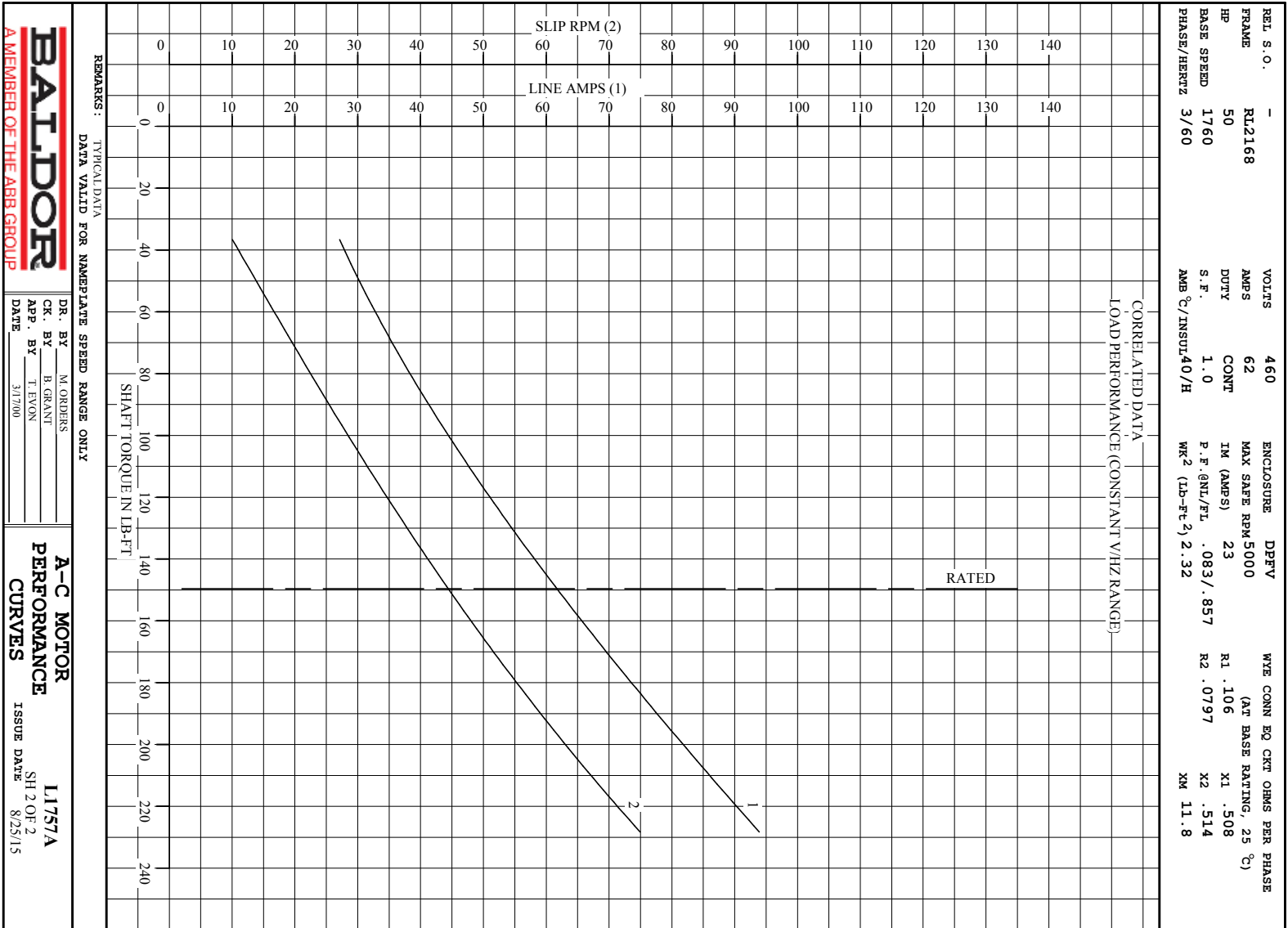
**A-C MOTOR**  
**PERFORMANCE**  
**DATA**  
L1757A  
ISSUE DATE 8/25/15



**BALDOR**  
A MEMBER OF THE ABB GROUP

DR. BY M. ORDERS  
 CR. BY B. GRANT  
 APP. BY T. EVON  
 DATE 3/17/00

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
 ISSUE DATE 8/25/15  
 L1757A  
 SH 1 OF 2



REMARKS: TYPICAL DATA  
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

**BALDOR**  
A MEMBER OF THE ABB GROUP

DR. BY M. ORDERS  
CR. BY B. GRANT  
APP. BY T. EVON  
DATE 3/17/00

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**

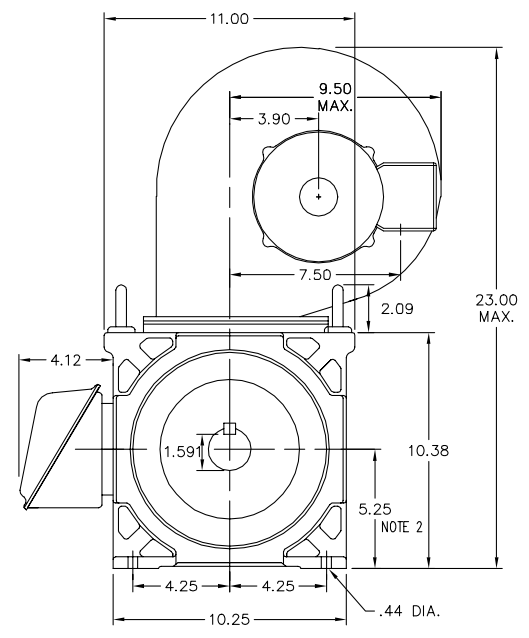
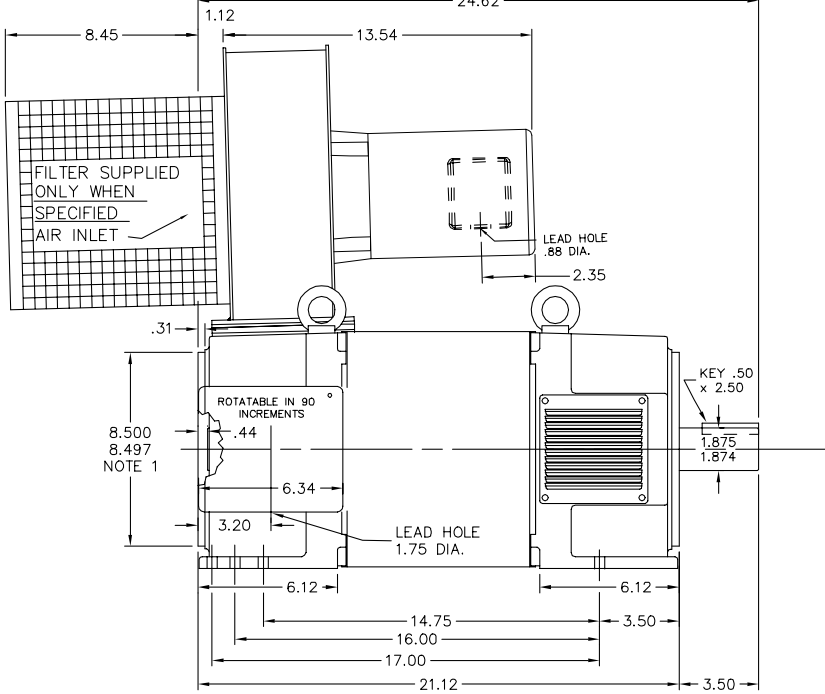
L1757A  
SH 2 OF 2  
ISSUE DATE 8/25/15

617206-001

ENCLOSURE: DRIPPROOF  
 MOUNTING: FOOT  
 DRIVE METHOD: COUPLED OR BELTED

**RPMAC VARIABLE SPEED ALTERNATING CURRENT MOTOR  
 RL & URL2168Z**

COOLING: FORCE VENTILATED  
 ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED



NOTE 1 TACHOMETER MOUNTING  
 1/2-13 TAP, .88 DEEP, ON A 7.25 DIA. BOLT CIRCLE  
 FACE RUNOUT AND ECCENTRICITY .004 MAX. T.I.R.

NOTE 2 SHAFT HEIGHT WILL NOT BE EXCEEDED.  
 SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY  
 REQUIRED FOR COUPLED OR GEARED MACHINES.

TERMINAL BOX MAY BE LOCATED F1 OR F2 IF SPECIFIED  
 61 AMP STEEL TERMINAL BOX SHOWN  
 REFER TO 616779-50 FOR SPECIFIC TERMINAL BOX DIMENSIONS

BLOWER ASSEMBLY CAN BE LOCATED TOP or SIDES.  
 BLOWER & TERMINAL BOX MAY NOT BE LOCATED ON SAME SIDE.  
 REFER TO 616779-51 FOR SPECIFIC TACHOMETER DIMENSIONS

MOTOR WEIGHT 345 LBS. (MAY VARY 15%)

DIMENSIONS ARE IN INCHES SCALE 1:1

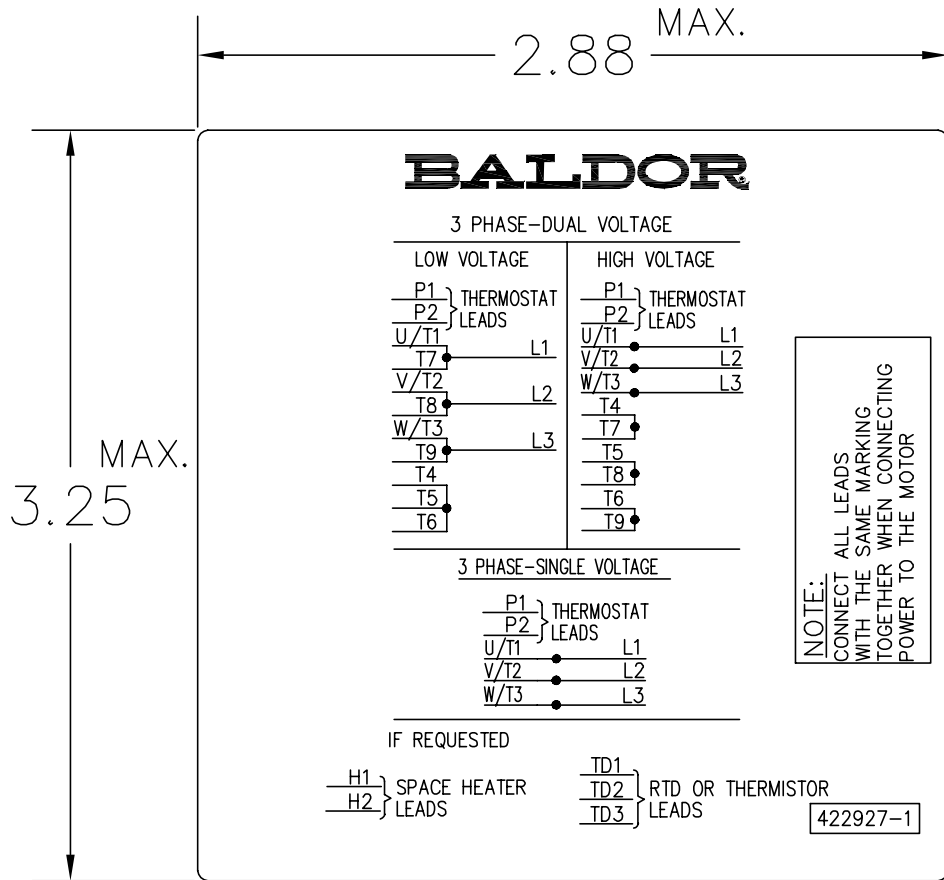
617206-001

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADDING CORRECT BLOWER MOTOR.			<b>BALDOR</b> DIM SHT RPMAC DPFV RL & URL2168Z PROV FOR TACH SH 1 of 1
REV. LTR: A	VERSION: 01	TDR: 000000763589	
FILE: \RGG\00003\054	REVISED: 03:36:46 09/05/2012	BY: RGGJGG	
MTL: -			



422927-001



NOTE:  
DATA TO BE SIZED SO THAT IT FITS INTO MATERIAL DECAL DIMENSIONS. MAKE LETTERS & NUMBERS AS LARGE AS POSSIBLE.

MATERIAL: CERAMATIC DGF-P4  
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS AND LINES TO BE BLACK ON WHITE BACKGROUND.

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 000000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

**BALDOR**

EXTERNAL CONNECTION LABEL

SH 1 of 1