



Customer information packet

D2010R-2

10HP, 1750RPM, DC, SC2113ATCZ, SPG

Specifications

Enclosure	DP
Frame	SC2113ATCZ
Frame Material	Exposed Laminations
Output Power	10.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Feedback Device	NO FEEDBACK
Field Winding Type	STAB SHUNT
Frame Prefix	SC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	28.00 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

Part detail

Revision	-
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G6190A A
Layout	609950-023
Eff. date	04-13-2015
CD Diagram	406770-001
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

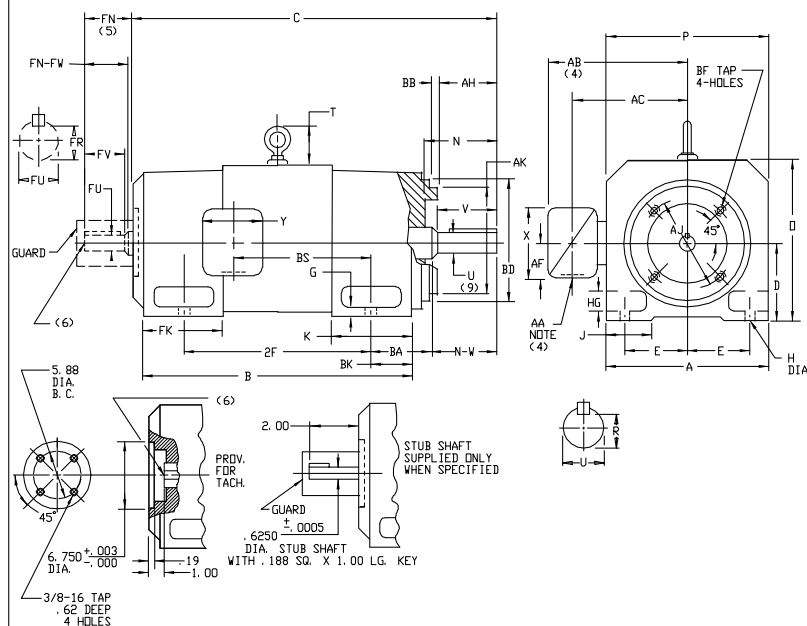
000613006HP									
CAT.NO.	D2010R-2	SPEC NO.		T21S1001					
FR	SC 2113ATCZ	HP	10		DUTY		CONT		
ENCL.	DP	RPM	1750/ 2300		S.F.		1.0		
ENCL MOD	GUARDED	VOLTS		240		INSUL		F	
MAX SAFE SPEED	4500	AMPS	37.00		AMB.		40		
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE		C					
VOLTS	240	D.E. BRG.		50BC03J30X					
MAX AMPS @ 25 C	2.20	O.D.E. BRG.		45BC02J30X					
HOT AMPS	1.56/ 1.08	MIN. AMB.		0		TYPE		TR	
BRUSH:419904051AB; SPLASHPROOF									

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED,
SPLASHPROOF, TOTALLY ENCLOSED
MOUNTING: FOOT, NEMA "C" FACE
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: SELF-VENTILATED
NON-VENTILATED
ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAMES SC2113ATCZ THRU LC2812ATCZ
DRIVE END SHAFT PER NEMA AC MOTOR SHAFT



DIMENSIONS ARE IN INCHES

FRAME	BB	BD	BF TAP	BF TAP 'DEPTH'	AJ	AK
SC2113ATCZ-LC2113ATCZ	.25	8.75	1/2-13	.75	7.25	8.5
SC2512ATCZ-LC2512ATCZ	.25	10.88	1/2-13	.75	7.25	8.5
MC2812ATCZ-LC2812ATCZ	.25	12.75	1/2-13	.75	9.00	10.5

FRAME	A	D(1)	E	G	H	HG	J	Q	P	T	BA	K	FK	BK
SC2113ATCZ-LC2113ATCZ	10.25	5.25	4.25	44	44	1.38	1.75	10.44	10.31	2.56	3.50	5.19	6.81	2.3
SC2152ATCZ-LC2152ATCZ	12.31	6.25	5.00	50	56	1.62	2.00	12.50	12.44	3.06	4.25	6.05	8.00	3.0
MC2181ATCZ-LC2181ATCZ	13.78	7.20	5.50	60	56	1.88	2.75	14.00	13.94	3.38	4.75	6.75	9.19	3.3

FRAME	C(7)	B	RS	2F	N	N-W	DRIVE END SHAFT AND KEY (9)						OPPOSITE DRIVE END SHAFT AND KEY(5)						WT. LBS	
							UH	V	FR(3)	SV	LGTH	FW	FN-W	FUX(2)	FW	FR(3)	SV	LGTH		
SG2131ATC7	28.00	22.50	11.38	18.00	3.62	3.36	1.3750	3.36	1.201	3.12	3.12	3.30	3.50	2.51	1.625	3.00	1.416	3.75	2.50	3.95
SG2131ATC7	29.25	23.75	12.62	18.00	3.62	3.36	1.3750	3.12	1.312	1.201	3.12	3.30	3.50	2.51	1.625	3.00	1.416	3.75	2.50	3.95
SG2131ATC7	30.88	25.38	14.25	18.00	3.62	3.36	1.3750	3.12	1.312	1.201	3.12	3.30	3.50	2.51	1.625	3.00	1.416	3.75	2.50	3.95
SG2131ATC7	31.44	25.96	12.06	20.00	4.25	4.00	1.625	3.75	3.75	1.416	3.75	2.88	4.00	3.75	1.875	3.50	1.991	500	2.30	5.15
MC2512ATC7	32.94	26.56	13.56	20.00	4.25	4.00	1.625	3.75	3.75	1.416	3.75	2.88	4.00	3.75	1.875	3.50	1.991	500	2.30	5.50
MC2512ATC7	34.44	28.68	15.06	20.00	4.25	4.00	1.625	3.75	3.75	1.416	3.75	2.88	4.00	3.75	1.875	3.50	1.991	500	2.30	5.90
MC2812ATC7	37.25	29.94	14.25	22.00	4.88	4.62	1.875	4.38	4.38	1.591	500	3.25	4.50	4.25	2.125	4.00	1.845	500	3.00	7.85
MC2812ATC7	39.50	32.19	16.50	22.00	4.88	4.62	1.875	4.38	4.38	1.591	500	3.25	5.00	4.25	2.125	4.00	1.845	500	3.00	8.60

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" AND "FU" VARY-----
U TO 1.625 DIA. + .0000, -.0005.
FU 1.625 AND LARGER + .000, -.001.
- (3) "R" AND "FR" VARY-----
R TO .005 DIA. + .000, -.015.
FR .005 DIA. + .000, -.015.
- (4) "A", "X", "Y" AND "Z" VARY WITH "D" FOR DIMENSIONS "AA", "AB", "AC", "AD", "AE", "AF", "AG", "AH", "AI", "AJ", "AK", "AL", "AM", "AN", "AO", "AP", "AQ", "AR", "AS", "AT", "AU", "AV", "AW", "AX", "AY", "AZ", "BA", "BB", "BC", "BD", "BE", "BF", "BG", "BH", "BI", "BJ", "BK", "BL", "BM", "BN", "BO", "BP", "BQ", "BR", "BS", "BT", "BU", "BV", "BW", "BX", "BY", "BZ", "CA", "CB", "CC", "CD", "CE", "CF", "CG", "CH", "CI", "CJ", "CK", "CL", "CM", "CN", "CO", "CP", "CQ", "CR", "CS", "CT", "CU", "CV", "CW", "CX", "CY", "CZ", "DA", "DB", "DC", "DD", "DE", "DF", "DG", "DH", "DI", "DJ", "DK", "DL", "DM", "DN", "DO", "DP", "DQ", "DR", "DS", "DT", "DU", "DV", "DW", "DX", "DY", "DZ", "EA", "EB", "EC", "ED", "EE", "EF", "EG", "EH", "EI", "EJ", "EK", "EL", "EM", "EN", "EO", "EP", "EQ", "ER", "ES", "ET", "EU", "EV", "EW", "EX", "EY", "EZ", "FA", "FB", "FC", "FD", "FE", "FF", "FG", "FH", "FI", "FJ", "FK", "FL", "FM", "FN", "FO", "FP", "FQ", "FR", "FS", "FT", "FU", "FV", "FW", "FX", "FY", "FZ", "GA", "GB", "GC", "GD", "GE", "GF", "GG", "GH", "GI", "GJ", "GK", "GL", "GM", "GN", "GO", "GP", "GQ", "GR", "GS", "GT", "GU", "GV", "GW", "GX", "GY", "GZ", "HA", "HB", "HC", "HD", "HE", "HF", "HG", "HH", "HI", "HJ", "HK", "HL", "HM", "HN", "HO", "HP", "HQ", "HR", "HS", "HT", "HU", "HV", "HW", "HX", "HY", "HZ", "IA", "IB", "IC", "ID", "IE", "IF", "IG", "IH", "II", "IJ", "IK", "IL", "IM", "IN", "IO", "IP", "IQ", "IR", "IS", "IT", "IU", "IV", "IW", "IX", "IY", "IZ", "JA", "JB", "JC", "JD", "JE", "JF", "JG", "JH", "JI", "JJ", "JK", "JL", "JM", "JN", "JO", "JP", "JQ", "JR", "JS", "JT", "JU", "JV", "JW", "JX", "JY", "JZ", "KA", "KB", "KC", "KD", "KE", "KF", "KG", "KH", "KI", "KJ", "KK", "KL", "KM", "KN", "KO", "KP", "KQ", "KR", "KS", "KT", "KU", "KV", "KW", "KX", "KY", "KZ", "LA", "LB", "LC", "LD", "LE", "LF", "LG", "LH", "LI", "LJ", "LK", "LL", "LM", "LN", "LO", "LP", "LQ", "LR", "LS", "LT", "LU", "LV", "LW", "LX", "LY", "LZ", "MA", "MB", "MC", "MD", "ME", "MF", "MG", "MH", "MI", "MJ", "MK", "ML", "MM", "MN", "MO", "MP", "MQ", "MR", "MS", "MT", "MU", "MV", "MW", "MX", "MY", "MZ", "NA", "NB", "NC", "ND", "NE", "NF", "NG", "NH", "NI", "NJ", "NK", "NL", "NM", "NN", "NO", "NP", "NQ", "NR", "NS", "NT", "NU", "NV", "NW", "NX", "NY", "NZ", "OA", "OB", "OC", "OD", "OE", "OF", "OG", "OH", "OI", "OJ", "OK", "OL", "OM", "ON", "OO", "OP", "OQ", "OR", "OS", "OT", "OU", "OV", "OW", "OX", "OY", "OZ", "PA", "PB", "PC", "PD", "PE", "PF", "PG", "PH", "PI", "PJ", "PK", "PL", "PM", "PN", "PO", "PP", "PQ", "PR", "PS", "PT", "PU", "PV", "PW", "PX", "PY", "PZ", "QA", "QB", "QC", "QD", "QE", "QF", "QG", "QH", "QI", "QJ", "QK", "QL", "QM", "QN", "QO", "QP", "QQ", "QR", "QS", "QT", "QU", "QV", "QW", "QX", "QY", "QZ", "RA", "RB", "RC", "RD", "RE", "RF", "RG", "RH", "RI", "RJ", "RK", "RL", "RM", "RN", "RO", "RP", "RQ", "RR", "RS", "RT", "RU", "RV", "RW", "RX", "RY", "RZ", "SA", "SB", "SC", "SD", "SE", "SF", "SG", "SH", "SI", "SJ", "SK", "SL", "SM", "SN", "SO", "SP", "SQ", "SR", "SS", "ST", "SU", "SV", "SW", "SX", "SY", "SZ", "TA", "TB", "TC", "TD", "TE", "TF", "TG", "TH", "TI", "TJ", "TK", "TL", "TM", "TN", "TO", "TP", "TQ", "TR", "TS", "TT", "TU", "TV", "TW", "TX", "TY", "TZ", "UA", "UB", "UC", "UD", "UE", "UF", "UG", "UH", "UI", "UJ", "UK", "UL", "UM", "UN", "UO", "UP", "UQ", "UR", "US", "UT", "UU", "UV", "UW", "UX", "UY", "UZ", "VA", "VB", "VC", "VD", "VE", "VF", "VG", "VH", "VI", "VJ", "VK", "VL", "VM", "VN", "VO", "VP", "VQ", "VR", "VS", "VT", "VU", "VV", "VW", "VX", "VY", "VZ", "WA", "WB", "WC", "WD", "WE", "WF", "WG", "WH", "WI", "WJ", "WK", "WL", "WM", "WN", "WO", "WP", "WQ", "WR", "WS", "WT", "WU", "WV", "WW", "WX", "WY", "WZ", "XA", "XB", "XC", "XD", "XE", "XF", "XG", "XH", "XI", "XJ", "XK", "XL", "XM", "XN", "XO", "XP", "XQ", "XR", "XS", "XT", "XU", "XV", "XW", "XX", "XY", "XZ", "YA", "YB", "YC", "YD", "YE", "YF", "YG", "YH", "YI", "YJ", "YK", "YL", "YM", "YN", "YO", "YP", "YQ", "YR", "YS", "YT", "YU", "YV", "YW", "YX", "YY", "YZ", "ZA", "ZB", "ZC", "ZD", "ZE", "ZF", "ZG", "ZH", "ZI", "ZJ", "ZK", "ZL", "ZM", "ZN", "ZO", "ZP", "ZQ", "ZR", "ZS", "ZT", "ZU", "ZV", "ZW", "ZX", "ZY", "ZZ".
- (5) DRIVE END SHAFT DIMENSIONS PER SAME FRAME SIZE NEMA "AC" MOTOR SHAFT.
- (6) TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
- (7) TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, V-7, OR C-1 MOUNTING IS SPECIFIED.
- (8) MOTOR VARIES WITH "D" FOR NON-STANDARD RATINGS AND OVERSIZES.
- (9) IF MOUNTING LOCATION DETAILS ARE REQUIRED, CONSULT FACTORY.
- (10) SHAFT RUNOUT .002 MAX. T. I. R.

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

REV. DESC: ADD SHAFT RUNOUT NOTE		
REV. LTR: A	VERSION: 01	TDR: 000001187063
FILE: \\RGG\00015\549	REVISED: 09:10:20 03/10/2022	BY: RGGNAS
MTL: -		

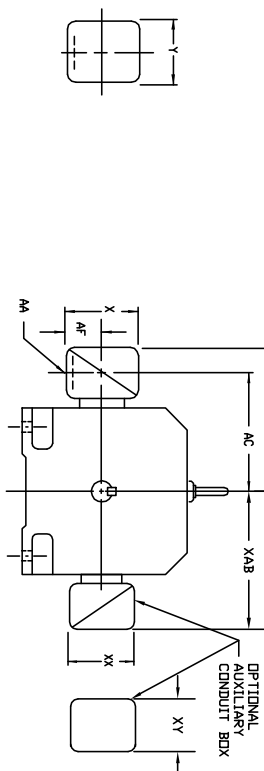
BALDOR - RELIANCE®

DIMENSION DRAWING,SC2113ATCZ – LC2812ATCZ,DPP,TENV,FOOT MTG

SH 1 of 1

**INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM III**

TERMINAL BOX DIMENSIONS STANDARD SIZE AND ONE SIZE LARGER
FRAMES C2113ATZ THRU C2815ATZ



DIMENSIONS ARE IN INCHES

STEEL TERMINAL BOX DIMENSIONS														
FRAME SIZE	MAX. AMP'S	STANDARD SIZE					PART NUMBER		ONE SIZE LARGER					PART NUMBER
		AB	AC	AF	X	Y	AK(1)	AB	AC	AF	X	Y		
C21 3A12	40	3/4 & 1"	8.97	4.7	1.94	4.38	5.00	705028-1-R	1-1/4 & 1-1/2	10.03	8.03	5.50	6.12	705029-1-R
C21 1SA12	96	1-1/4 & 1-1/2	10.03	8.03	5.50	5.50	6.12	705029-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62
C21 2SA12	128	1-1/2 & 2"	11.16	8.41	3.19	7.00	7.62	705030-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62
C25 1A12	40	3/4 & 1"	10.03	8.53	1.94	4.38	5.00	705028-1-R	1-1/4 & 1-1/2	11.09	9.09	5.50	5.50	6.12
C25 1A12	96	1-1/4 & 1-1/2	11.09	9.09	5.50	5.50	6.12	705029-1-R	2" & 2-1/2	12.82	9.47	3.19	7.00	7.62
C25 2A12	128	1-1/2 & 2"	12.82	9.47	3.19	7.00	7.62	705030-1-R	2" & 2-1/2	12.82	9.47	3.19	7.00	7.62
C28 1A12	128	2"	14.03	10.53	4.25	8.44	7.25	748747-1-R		14.47	11.82	4.25	8.44	7.25
C28 1A12	185	3"	14.47	11.52	4.25	8.44	7.25	748747-2-R		15.91	13.47	5.38	10.75	8.50
C28 1A12	269	4"	15.91	11.84	5.38	10.56	9.50	740830-3-R	5" (4)	18.72	13.84	7.00	12.75	15.00

FRAME SIZE	MAX. AMPS	CAST IRON TERNAL BOX DIMENSIONS										PART									
		STANDARD SIZE					PART					DNE SIZE LARGER					PART				
		AA3/2	AB	AC	AF	X	Y	Z	NUMBER		AA3/2	AB	AC	AF	X	Y	Z	NUMBER			
C21 19A1Z	18	3/4	10.03	8.03	2.50	5.00	5.75	705028-2-S	1*	10.03	8.03	2.50	5.00	5.75	705028-2-T						
C21 19A1Z	40	1"	10.03	8.03	2.50	5.00	5.75	705028-2-T	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-R						
C21 19A1Z	96	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-S	2"	10.97	8.53	3.00	6.00	7.00	705029-2-S						
C21 19A1Z	208		10.97	8.53	3.00	6.00	7.00	705029-2-R	2-1/2	12.66	8.91	3.62	7.88	9.25	705030-2-S						
C21 19A1Z	18	3/4	11.09	9.09	2.50	5.00	5.75	705028-2-T	1*	11.09	9.09	2.50	5.00	5.75	705028-2-T						
C21 19A1Z	40	1"	11.09	9.09	2.50	5.00	5.75	705028-2-S	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-S						
C21 19A1Z	96	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R	2"	12.03	9.59	3.00	6.00	7.00	705029-2-S						
C21 19A1Z	208		12.03	9.59	3.00	6.00	7.00	705029-2-R	2-1/2	13.47	9.97	3.62	7.88	9.25	705030-2-S						
C21 19A1Z	128	2"	12.78	10.34	3.00	6.00	7.00	705030-1	3*	14.72	10.72	3.62	7.88	9.25	767000-R8						
C21 19A1Z	185	3"	14.47	10.72	3.62	7.88	9.25	767000-R8	4*	15.98	11.34	4.12	9.50	10.50	767000-R						
C21 19A1Z	269	4"	15.78	11.57	4.12	9.50	10.50	767000-R	5* (4)	18.59	12.97	4.12	10.72	11.50	766700-S						

CONDUIT BODY DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)									
STANDARD SIZE									
FRAME SIZE	AMP	AB	AC	AE	X	AA	Y	PART NUMBER	PART NUMBER
C210	100	10.71	8.98	2.72	7.48	--	7.48	706310-56-A	706310-225-R
	200	11.26	9.25	3.35	8.82	--	8.82	706310-56-B	706310-225-R
	100	11.30	9.57	2.72	7.48	--	7.48	706310-56-A	706310-225-R
C250	200	11.85	9.84	3.35	8.82	--	8.82	706310-56-B	706310-226-R
	400	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636
	800	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636
C280	200	12.60	10.59	3.76	8.82	--	8.82	706310-56-B	706310-226-R
	400	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636
	800	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636
	1600	18.27	13.54	7.68	15.35	--	15.35	706310-63-C	706310-63-C

OPTICAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)									
FRAME SIZE		YAB	XY	PART NUMBER	FRAME SIZE		YAB	XY	PART NUMBER
C210	7.38	4.25	4.25	662007-26-A	C210	10.88	8.00	8.00	706310-3-B
C230	8.44	4.25	4.25	662007-26-A	C230	11.88	8.00	8.00	706310-3-B
C280	9.12	4.25	4.25	662007-26-A	C280	12.62	8.00	8.00	706310-3-B

- (1) **“A/C CONDUIT.**
- (2) **“STEEL TERMINAL BOX FOR C2131A2T AND C25121A2T FRAMES PROVIDED WITH DOUBLE KNUCKOUT.**
- (3) **“A/C PIPE TAP.**
- (4) **TERMINAL BOX 76670-05 AND 76670-08 EXTENDING BELOW MOTOR FEET.**

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

REV. DESC: ADD 706310-63G C/BOX TO C250 AND C280 FRAMES		
REV. LTR: A	VERSION: 01	TDR: 000000816512
FILE: \RGG\00021\153		REVISED: 03:09:09 09/06/2013
MTL: -		BY: RGGWT

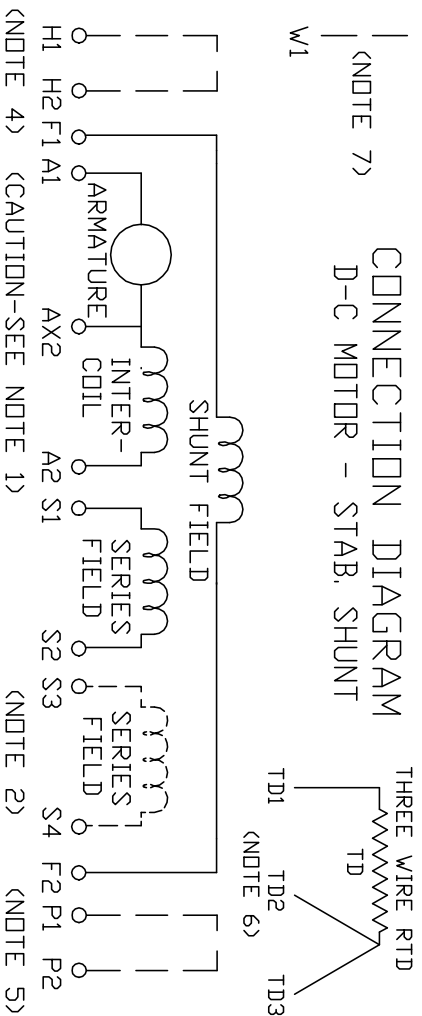
BALDOR

DIMENSION SHEET

SH 1 of 1

406770-001

CONNECTION DIAGRAM D-C MOTOR - STAB. SHUNT



ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS



ROTATION FACING COMMUTATOR END

1. CAUTION — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL SERIES FIELD IS MARKED S3 AND S4. FOR CUMULATIVE SERIES FIELD, CONNECT S3 TO S2 AND CONNECT S4 TO NEGATIVE. FOR DIFFERENTIAL SERIES FIELD CONNECT S4 TO S2 AND S3 TO NEGATIVE.
3. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
4. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
5. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
6. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3.
7. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
8. WARNING — MOTOR MUST BE GROUNDED TO PREVENT SERIOUS INJURIES TO PERSONNEL. GROUND THE MOTOR PER IEC, NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL ELECTRICAL CODES. A TAPPED HOLE IS PROVIDED IN THE CONDUIT BOX, ON THE FOOT. FRAME BRACE OR OPPOSITE DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER	CUSTOMER ORDER NO.	RELANCE S.D. NO.
_____	_____	_____

406770-001

BALDOR

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

SH 1 of 1

REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8

REV. LTR: A

VERSION: 01

TDR: 000000970330

FILE: \RSN\00026\422

REVISÉ: 10:19:12 03/11/2016

BY: RAGTBM

MTL: —