



# **BALDOR® • *RELIANCE***

## **Product Information Packet**

### **ECP83665T-4**

**5HP,1750RPM,3PH,60HZ,184T,TEFC,FOOT**

Product Detail			
<b>Model Number:</b>	ECP83665T-4	<b>Environment:</b>	Harsh / Mill & Chemical
<b>Voltage:</b>	460	<b>HP:</b>	5
<b>Rpm:</b>	1750	<b>Efficiency:</b>	Premium (XE)
<b>Phase:</b>	3	<b>Frequency:</b>	60
<b>Inverter Duty:</b>	*	<b>Enclosure:</b>	TEFC
<b>Frame Group:</b>	180	<b>Frame Size:</b>	L184T
<b>Features:</b>	Meets IEEE-841	<b>Mounting:</b>	Foot Mounted
<b>Service Factor:</b>	1.15	<b>Enclosure Group:</b>	TEFC
<b>List Price:</b>	1212.00	<b>Price Symbol:</b>	SD
<b>Speed Range:</b>	1201-1800	<b>Insulation Class:</b>	F
<b>Nema Design:</b>	B	<b>Encl Enhancement:</b>	
<b>Catalog Page:</b>	M-22,B	<b>Dimension Sheet:</b>	615470-844
<b>Connection Diagram:</b>	416820-24	<b>Electric Design:</b>	E02665-D-N005
<b>Single HP:</b>	5	<b>Get Notes:</b>	Meets IEEE-841
<b>Revision:</b>		<b>Instruction Manual:</b>	B-3620
<b>Application:</b>	General Purpose	<b>Epact:</b>	Y
<b>Scaled Drawing:</b>		<b>Obsolete:</b>	N
<b>Last Data Source:</b>	RAG,MADD	<b>Bearing Type:</b>	
<b>Electrical Type:</b>	P	<b>Mounting Pos:</b>	
<b>Ambient:</b>	40	<b>Duty:</b>	CONT
<b>Amps:</b>	6.60	<b>Nominal Eff:</b>	89.5
<b>Kva Code:</b>	J	<b>Power Factor:</b>	79.7
<b>Poles:</b>	04	<b>Weight:</b>	138

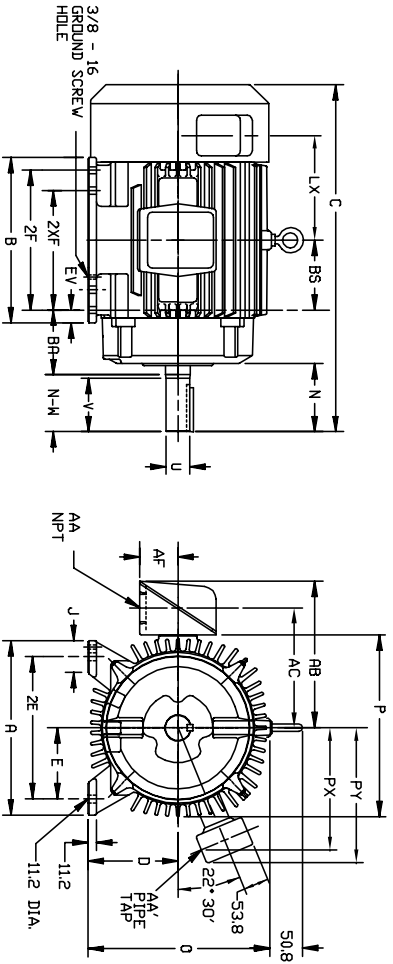


# DUTY MASTER ALTERNATING CURRENT MOTORS

ENCLOSURE: TOTALLY ENCLOSED  
 SQUIPTEL-CAGE INDUCTION  
 CAST IRON CONSTRUCTION  
 MOUNTING: FOOT

FRAMES 180T THRU 210T  
 841XL

COOLING: FAN COOLED  
 ACCESSORIES: AUXILIARY  
 CONDUIT  
 BOX



DIMENSIONS ARE IN MILLIMETERS. SEE SHEET 1 FOR DIMENSIONS IN INCHES

FRAME	A	D(2)	E	J	D	CAST IRON TERMINAL BOX	
						AA(K7)	AB
182T-1184T	2286.6	114.3	95.3	44.5	251.0	241.3	1
213T-215T	2667.7	133.4	108.0	50.8	285.8	279.4	1-1/4
							249.2
							198.4
							63.5
							88.9

FRAME SIZE	C	BS	B	EV	2F	2XF	N	SHAFT AND KEY		WEIGHT (KG) (3)			
								N-(6)	UC2				
182T	396.7	639	177.8	19.1	---	114.3	76.2	639	28575	635	6.35	44.5	39
184T	396.7	639	177.8	19.1	139.7	---	76.2	639	28575	635	6.35	44.5	41
182T	434.8	88.9	215.9	19.1	---	114.3	76.2	639	28575	635	6.35	44.5	53
184T	434.8	88.9	215.9	19.1	139.7	---	76.2	639	28575	635	6.35	44.5	55
213T	490.5	88.9	215.9	19.1	---	139.7	91.9	85.9	34925	79.2	7.92	60.5	61
215T	490.5	88.9	215.9	19.1	177.8	---	91.9	85.9	34925	79.2	7.92	60.5	66
L213T	512.8	100.1	231.6	15.7	---	139.7	91.9	85.9	34925	79.2	7.92	60.5	79
L215T	512.8	100.1	231.6	15.7	177.8	---	91.9	85.9	34925	79.2	7.92	60.5	84

FRAME CAST IRON AUX. TERM. BOX (3)			
SIZE	LX	FX	AA (7)
180T	101.6	179.3	220.7
180T	120.7		3/4
210T	141.2	196.1	237.2
L210T	141.2		3/4

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) 'P' MAY VARY +0, -8
- (3) 'U' VARIES +000, -013
- (4) ALL FRAMES HAVE MOUNTING HOLES FOR DUAL MOUNTING. FRAME SIZES WITHOUT THE 'L' DESIGNATION ARE SUITABLE FOR CONVERSION TO F-2 MOUNTING. FRAME SIZES WITH THE 'L' DESIGNATION ARE NOT SUITABLE FOR CONVERSION TO F-2 MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) 'N-V' VARIES +0, -6.4
- (7) DIMENSIONS ARE IN INCHES.
- (8) AUXILIARY TERMINAL BOX SUPPLIED ONLY WHEN SPECIFIED

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-V-1, W-4-V-5-W-7, OR C-1 MOUNTING IS SPECIFIED.  
 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
 MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .03 T.I.R.

FRAME- \_\_\_\_\_ TYPE- \_\_\_\_\_ CERTIFIED FOR- \_\_\_\_\_  
 ORDER- \_\_\_\_\_ ITEM- \_\_\_\_\_ HP- \_\_\_\_\_ RPM- \_\_\_\_\_ PH- \_\_\_\_\_ HZ \_\_\_\_\_ VOLTS \_\_\_\_\_  
 RELIANCE SALES ORDER- \_\_\_\_\_ APPROVED BY- \_\_\_\_\_ DATE \_\_\_\_\_

**RELIANCE ELECTRIC**  
 CLEVELAND, OHIO 44117 U.S.A.

DR. BY: BECHRISTIAN  
 CK BY: CEPVILLBY  
 APP. BY: CEPVILLBY  
 DATE: 11-24-03

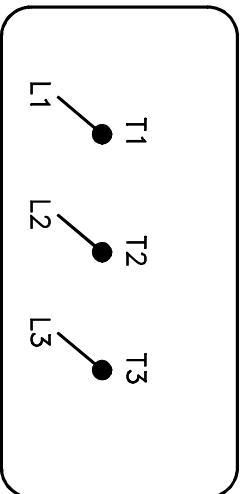
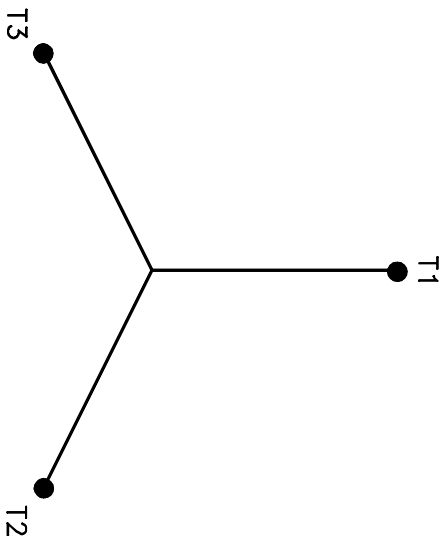
DIMENSION SHEET  
 SHEET 2 OF 2

615470-844  
 ISSUE DATE: NOVEMBER 24, 2003

C/R ASA00695

DIST - 10-541-05

A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 3 LEAD Y CONNECTED



(N.P. 1575-BA)

CUSTOMER \_\_\_\_\_

CUSTOMER ORDER NO. \_\_\_\_\_

RELIANCE S.O. NO. \_\_\_\_\_



DR. BY - NFJ  
CK. BY - SS  
APP. BY - HE  
DATE 10/8/76

CONNECTION DIAGRAM

416820-24  
ISSUE DATE APRIL 7, 1977

E:\DIAG\416820\024 RAG

10-541-04

C/R

REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	L184T	5	P	3/60	1750	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
6.6	CONT	40/F	1.15	B	J	FCKE
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (BETWEEN LINES)		
535580	418424052PE	---	---	2.58		

PERFORMANCE


LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0	3.0	1800	6.52	0
1/4	1.25	3.4	1789	40.8	84.6
2/4	2.50	4.2	1777	62.3	89.4
3/4	3.75	5.3	1765	73.6	90.1
4/4	5.00	6.6	1752	79.7	89.5
5/4	6.25	7.9	1737	83.5	88.3

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	239	35.9	46.0
PULL UP	275	223	33.5	45.0
BREAKDOWN	1396	329	49.3	28.1
FULL LOAD	1752	100	15.0	6.6

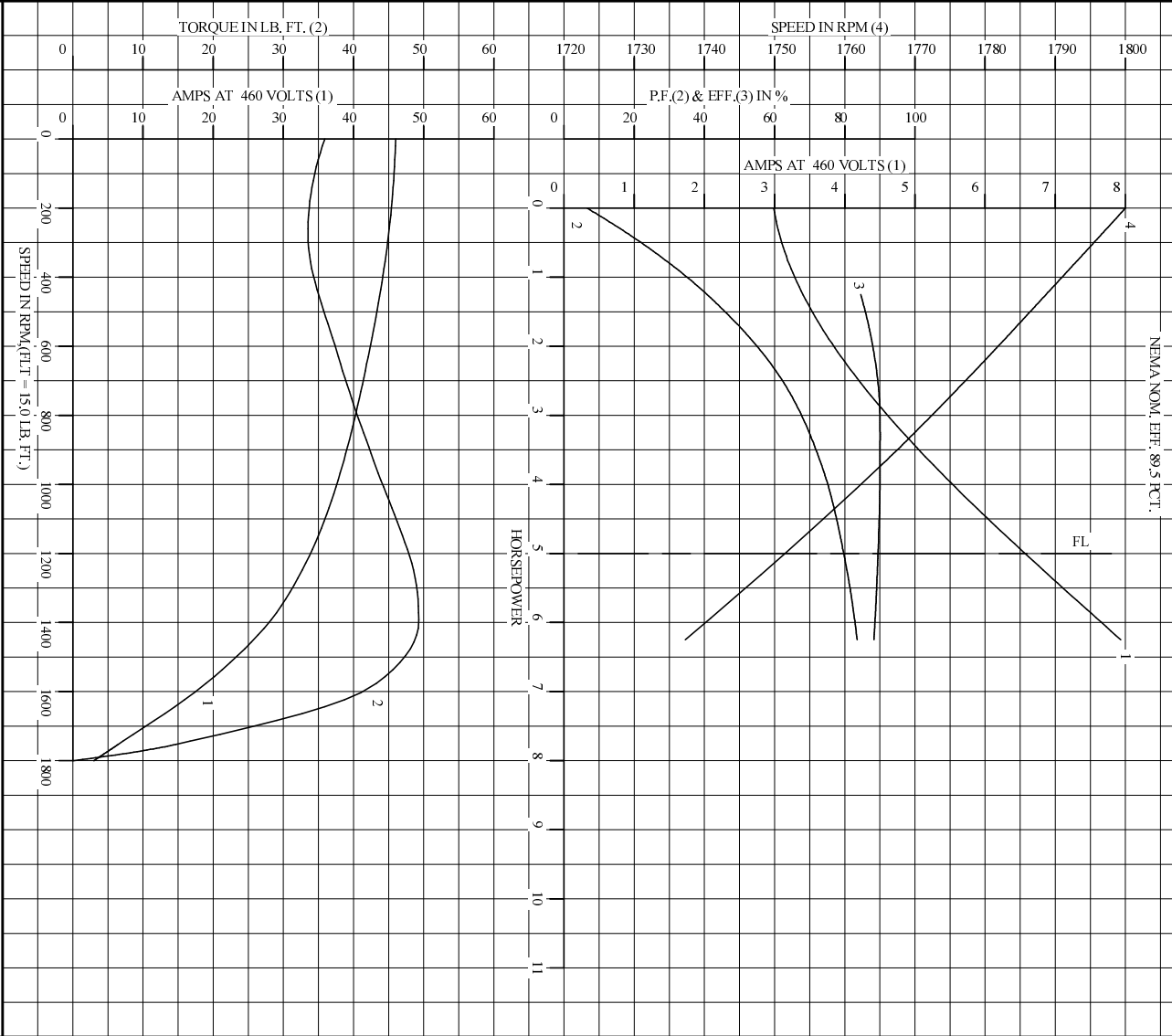
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: CALCULATED DATA  
NEMA NOM. EFF. 89.5 PCT.

	DR. BY W. L. SMITH	<b>A-C MOTOR</b> <b>PERFORMANCE DATA</b> E02665-D-N005 ISSUE DATE 10/31/05
	CK. BY J.J. HARRISON APP. BY W. L. SMITH DATE 10/31/05	

1

RET. S.O.	FRAME L184T	RPM 1750	S.F. 1.15	ROTOR 418424052FE
HP 5	TYPE P	VOLTS 460	NEMA DESIGN B	TEST S.O. CALCULATED DATA
PHASE/HERTZ 3/60	AMP C/INSUL 40/F	AMPS 6.6	CODE LETTER J	TEST DATE ---
		DUTY CONT	ENCLOSURE FCXE	STATOR RES. @ 25 °C 2.58
			E/S 535580	OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY W.L. SMITH  
 CK. BY J.HARRISON  
 APP. BY W.L. SMITH  
 DATE 10/31/05

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
 E02665-D-N005  
 ISSUE DATE 10/31/05