

# ABB BALDOR RELIANCE III

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## Customer information packet

### SPM4413TS-4

150HP, 3575RPM, 3PH, 60HZ, 447TS, A44104M, TEF

Class - CLI GP A,B,C,D; CLII GP F,G

Division - Division II

**Specifications**

Enclosure	TEFC
Frame	447TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D; CLII GP F,G
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	150.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV CURUSEEV NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	163.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	163.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Max Speed	4500 rpm
Motor Lead Quantity/Wire Size	6 @ 1/0 AWG

**Part Detail**

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG5887
Layout	617439-174
Eff. date	04-21-2025
CD Diagram	416820-036
Poles	02
Leads	3#1/0 (02 per group)
Proprietary	False
Created date	11-27-2024

<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A44104M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	44.58 IN
<b>Power Factor</b>	91
<b>Product Family</b>	General Industrial
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.375 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	Shaft Slinger
<b>Speed</b>	3575 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None

**Nameplate**

<b>NP2496L</b>
MOBIL POLYREX EM

**NP4562L**

<b>CAT NO</b>	SPM4413TS-4	<b>SPEC NO.</b>	A44-5000-5887		<b>I.P.</b>	55				
<b>HP</b>	150	<b>AMPS</b>	163	<b>VOLTS</b>	460	<b>DESIGN</b>	B			
<b>FRAME SIZE</b>	447TS	<b>RPM</b>	3575	<b>MAX RPM</b>	4500	<b>HZ</b>	60	<b>AMB</b>	40	<b>C</b>
<b>D.E. BRG.</b>	65BC03J30X	<b>PH.3</b>	3	<b>DUTY</b>	CONT	<b>INSUL.CLASS</b>	F			
<b>O.D.E. BRG.</b>	65BC03J30X	<b>TYPE P</b>	P	<b>ENCL</b>	TEFC	<b>SF</b>	1.15	<b>CODE</b>	G	
<b>POWER FACTOR</b>	91	<b>MAX CORR KVAR</b>	16	<b>NEMA NOM EFFICIENCY</b>	95.4	<b>MOTOR WEIGHT</b>		<b>LBS</b>		
<b>CL.I,DIV 2,GRP:</b>	A,B,C,D	<b>T.CODE</b>	T3B	<b>CL.1,ZONE 2,GRP:</b>	IIA,IIB,IIC	<b>T=</b>	165	<b>C</b>	<b>INVERTER T.CODE</b>	T3
<b>CL.II,DIV 2,GRP:</b>	F,G	<b>T.CODE</b>	T3C	<b>CL II ZONE 22 GRPS IIIB</b>	T=	160	<b>C</b>	<b>INVERTER T.CODE</b>	T3C	
<b>ID LOGO</b>	<b>INV TYPE:</b>	<b>VPWM</b>	<b>CT</b> 30	<b>TO</b> 60	<b>VT</b> 3	<b>TO</b> 60	<b>CHP</b> 60	<b>TO</b> 70		
<b>ID LOGO</b>	<b>1.0 SF VPWM</b>	<b>WK2</b>	27.2	<b>LBFT2</b>	<b>SL HZ</b>	0.4	<b>MAG CUR</b>	38.1		
<b>SER.NO.</b>		<b>MEETS INTENT OF IEEE-45</b>				<b>FOR WEATHER PROTECTION</b>				

## DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

FRAME G447TS ABOVE NEMA RATINGS

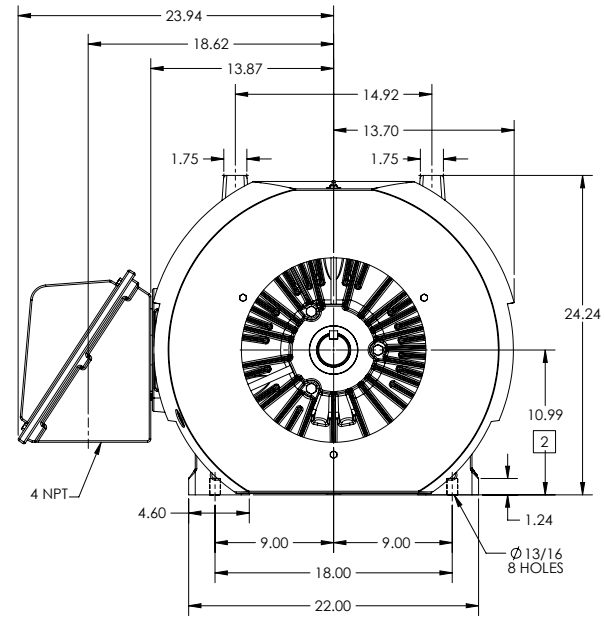
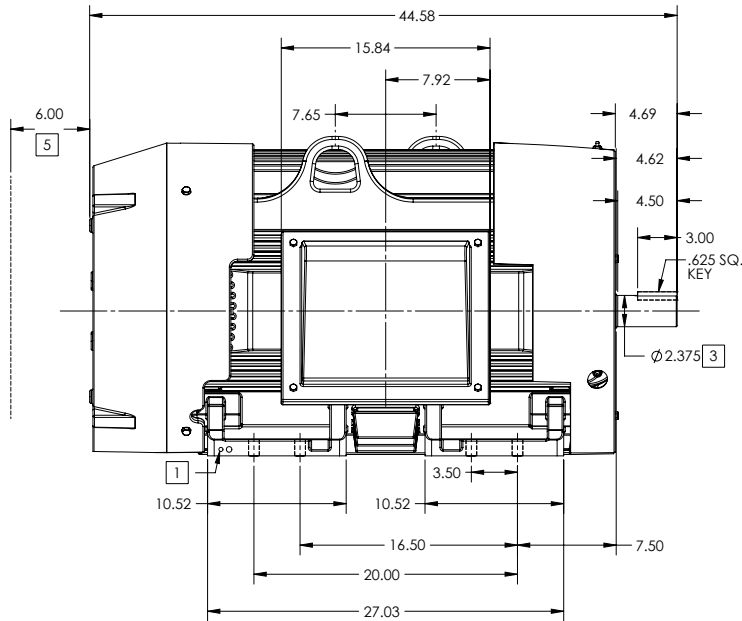
COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445TS FRAME MOUNTING HOLES

ENCLOSURE ENHANCEMENT: SEVERE DUTY

WITH TACONITE SLINGERS



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00-.06
3. VARIES +.00-.001
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

**4** WEIGHT (LBS): 2480

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.  
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF  
STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

SHEET NUMBER  
**1 OF 2**

FL1-7439-174

REV. DESC: NEW	VERSION: 00	REVISED: 11-26-41 10/31/2023	TDR: 000001219171
MODEL NO. 617439-174	REF:		
BY: ENSTEKO	Material:		

**BALDOR**

G447TS445TS TEF FC FT CAST IRON BOX DIV 2 CL 2 AIR DEF

## DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

FRAME G447TS ABOVE NEMA RATINGS

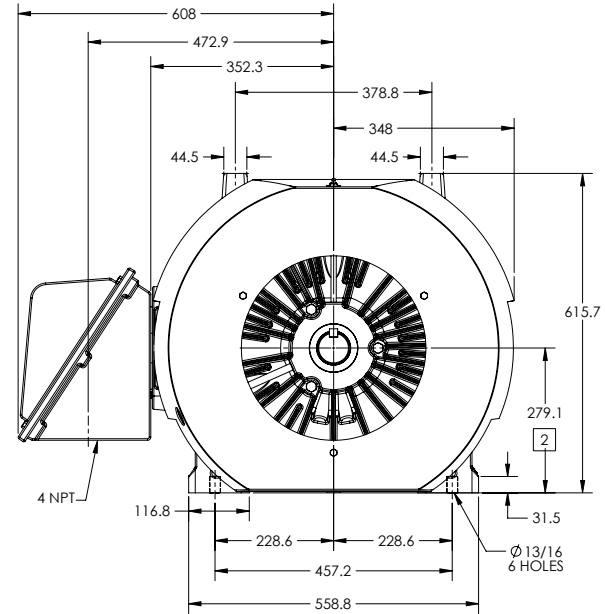
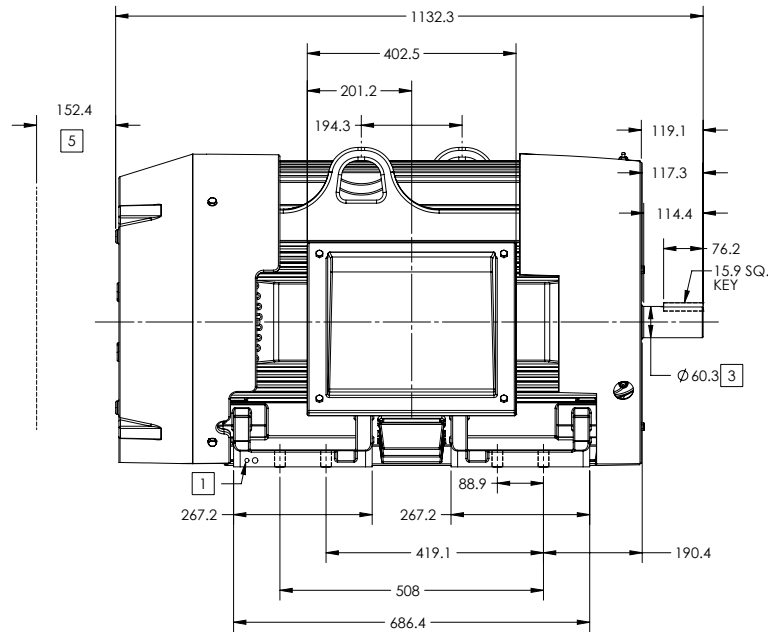
COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES G445TS FRAME MOUNTING HOLES

ENCLOSURE ENHANCEMENT: SEVERE DUTY

WITH TACONITE SLINGERS



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

**4 WEIGHT (KGS): 1125**

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.  
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF  
STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

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

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER  
**2 OF 2**

FL1-74719

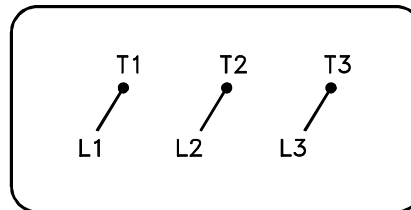
REV. DESC: NEW	VERSION: 00	REVISED: 11-26-41 10/31/2023	TDR: 000001219171
MODEL NO. 617439-174	REF:		
BY: ENSTEKO	Material:		

**BALDOR**

G447TS445TS TEF FC F1 FT CAST IRON BOX DIV 2 CL 2 AIR DEF

416820-036

A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682	REVISED: 11: 54: 06 04/30/2010	
MTL: -	BY: RAGRA	

**BALDOR**

CONN DIAG - STANDARD 3 LEAD  
SH 1 of 1