



DIMENSIONS & DATA
ELECTRIC FIRE PUMP CONTROLLER
WITHOUT TRANSFER SWITCH



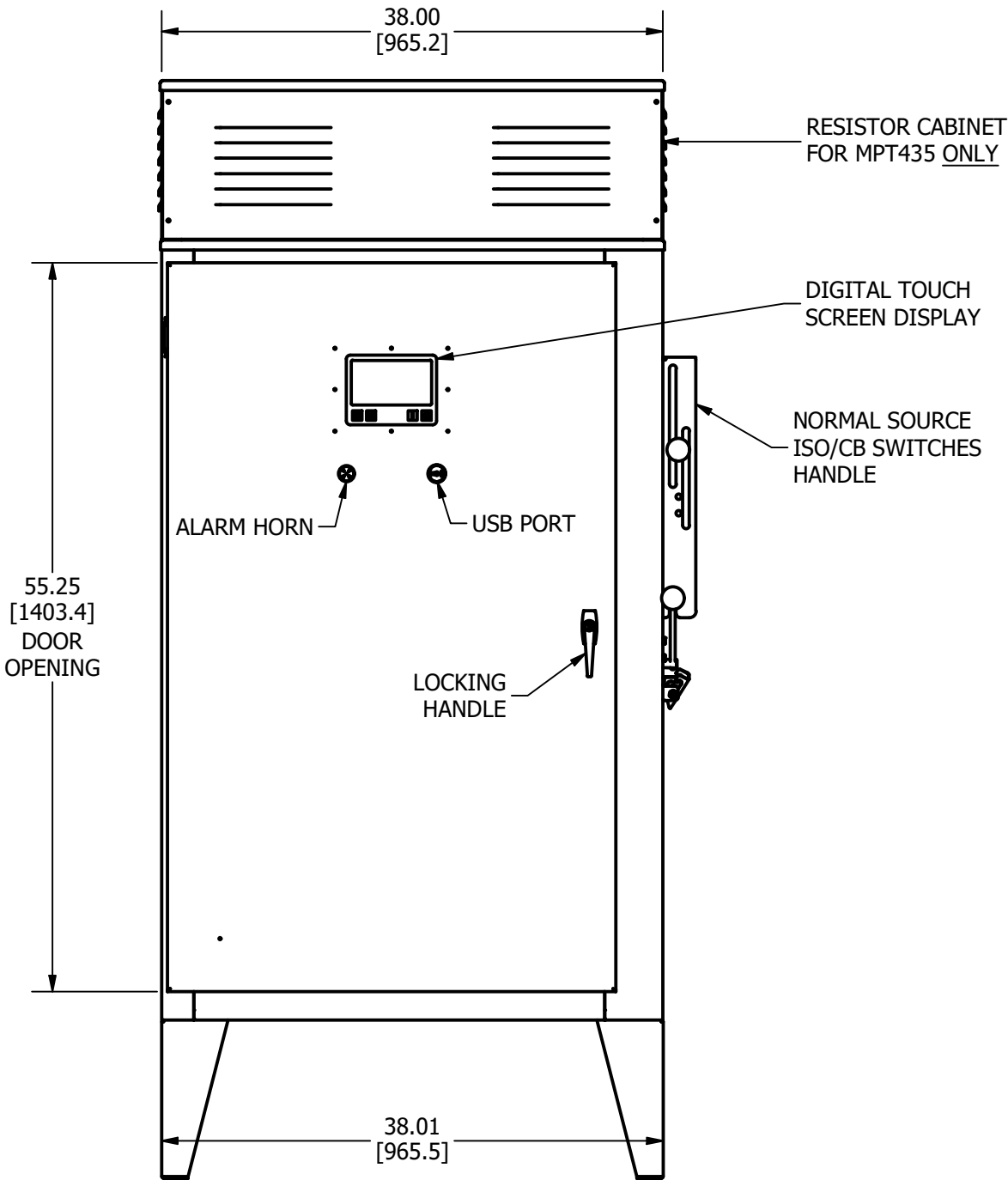
**MPT300, MPT420,
MPT430, MPT435,
MPT700**

D

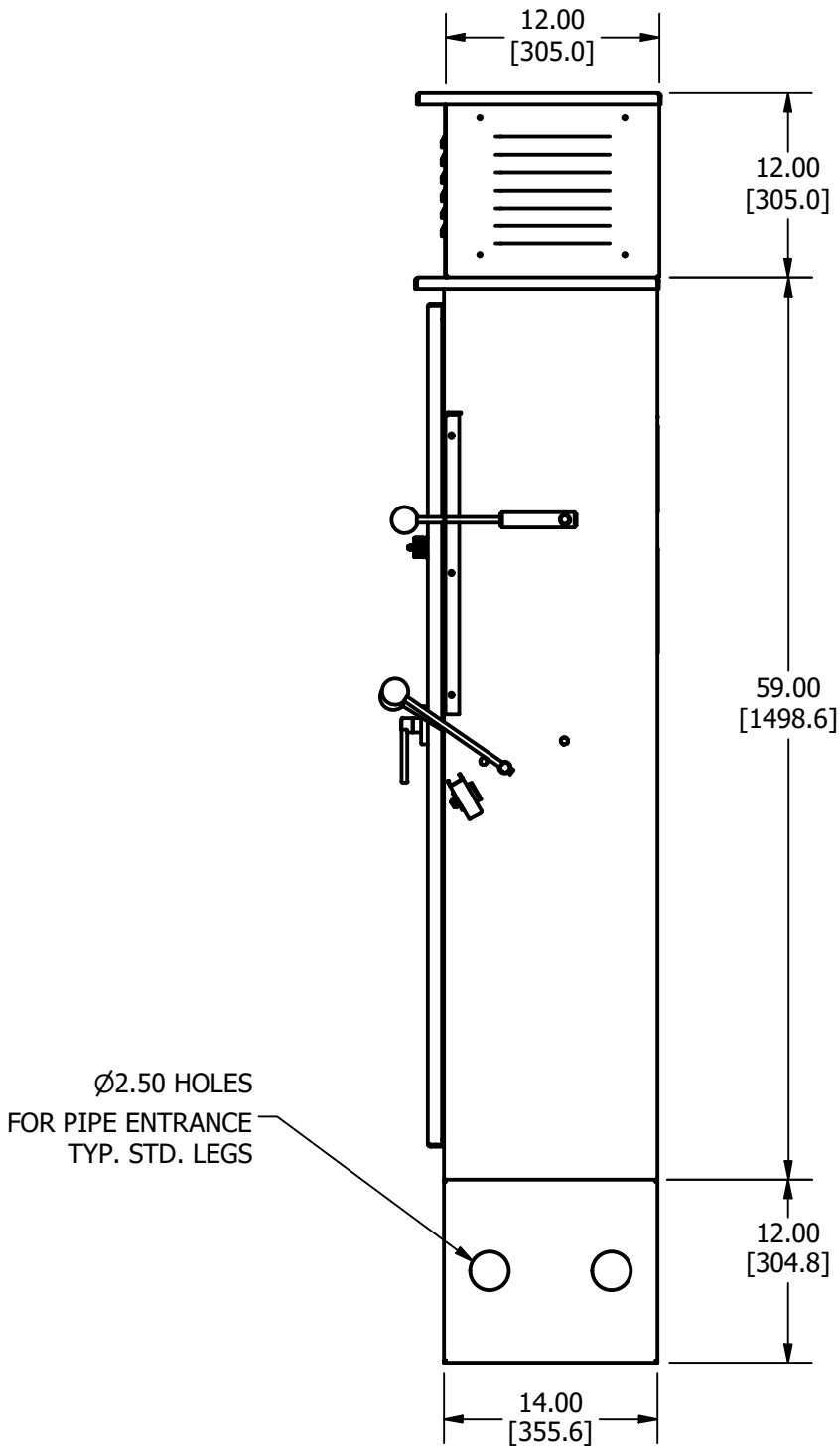
C

B

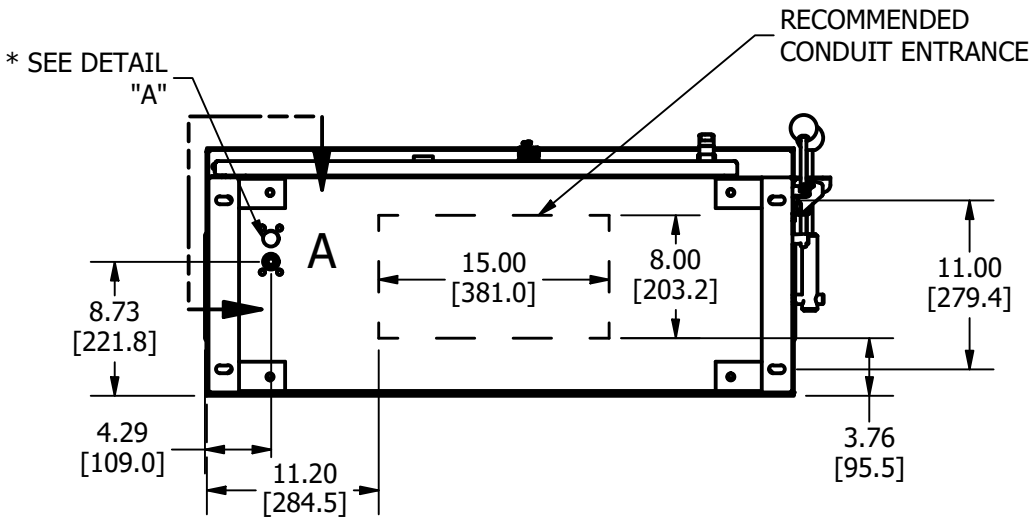
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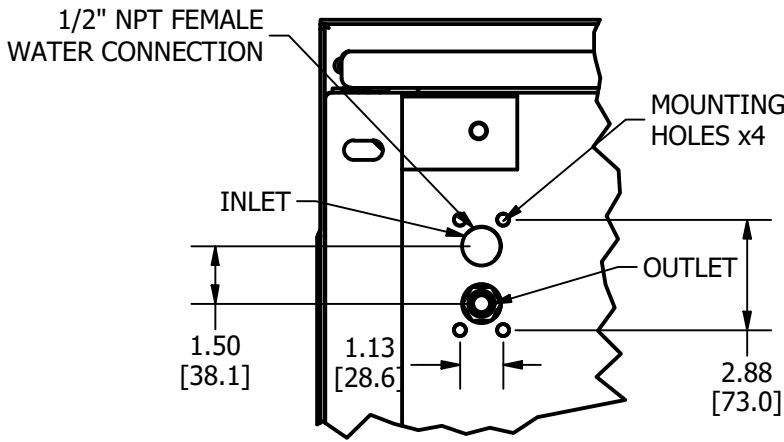
FRONT VIEW



SIDE VIEW



BOTTOM VIEW



**DETAIL A
PLUMBING**

VOLTAGES	HORSEPOWERS			
	MPT300	MPT420	MPT430 & MPT435	MPT700
ALL	N/A	N/A	125-150	100
208V	N/A	N/A	125-200	100-125
220-240V	200	200	200-300	150-200
380-415V	350-400	350-400	250-400	200-250
440-480V	500	500	300-500	250-300

ENCLOSURE TYPES
TYPE 3R CRS (STD) SHOWN
TYPE 4 CRS
TYPE 4X CRS
TYPE 304 SS (PAINTED)
TYPE 304 SS UNPAINTED
TYPE 316 SS PAINTED
TYPE 316 SS UNPAINTED

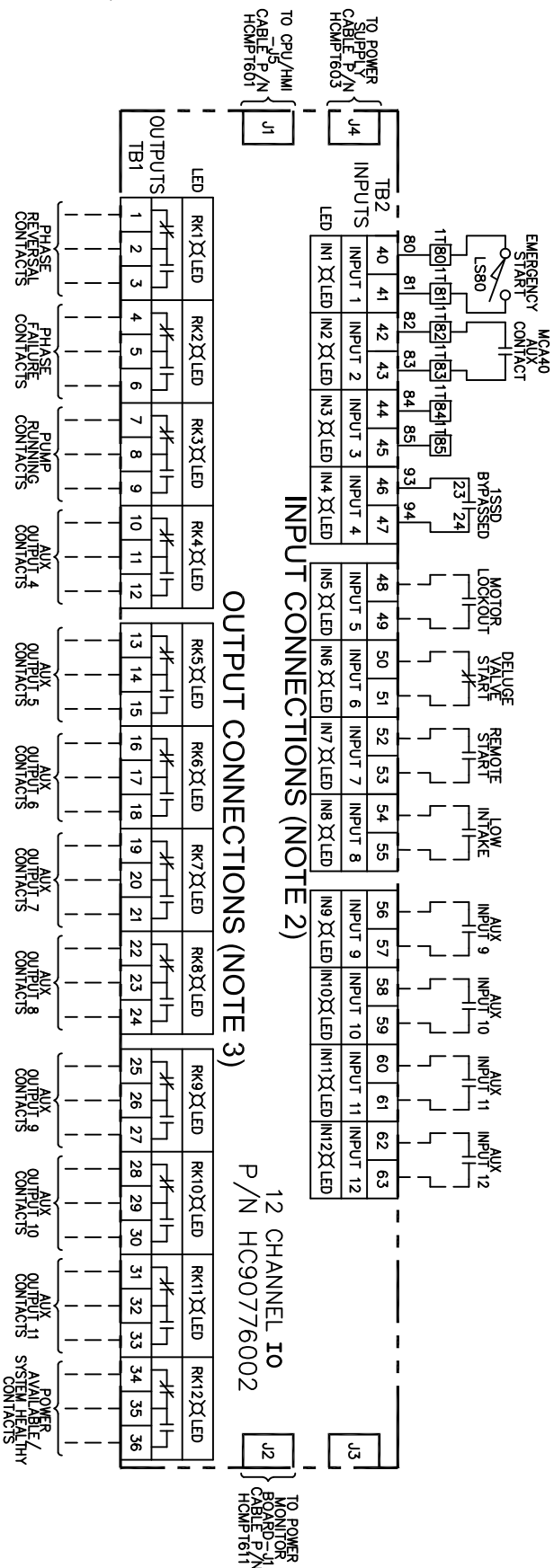
SELECTION TABLE (CHOOSE FROM TABLES ON LEFT)			
CONTROLLER TYPE	HP	VOLTAGE	ENCLOSURE TYPE
MPT300			
MPT420			
MPT430			
MPT435			
MPT700			

- NOTES:**
- ENCLOSURE MADE FROM 14GA. STEEL WITH HAMMER RED FINISH.
 - ENTER CABLE(S) FROM BOTTOM
 - PROTECT INTERNAL EQUIPMENT FROM DRILLING CHIPS
 - DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE. ALWAYS CONSULT FACTORY TO CONFIRM CURRENT INFORMATION
 - TYPE 3R SHOWN.
 - ALL DIMENSIONS IN INCHES. ALL DIMENSIONS ARE SAME AFOR 3R, 4/12 AND 4X ENCLOSURE TYPES.

CONTROLLER WITHOUT MTS (NO TRANSFER SWITCH)		RATING:
DATE: 5/15/2015	DRAWN BY: S. JUDD	REV. N/A
METRON Division of - Hubbell ICD, Inc. 4301 Cheyenne Drive Archdale, N.C. 27263		DRAWING NO. MPTD33780

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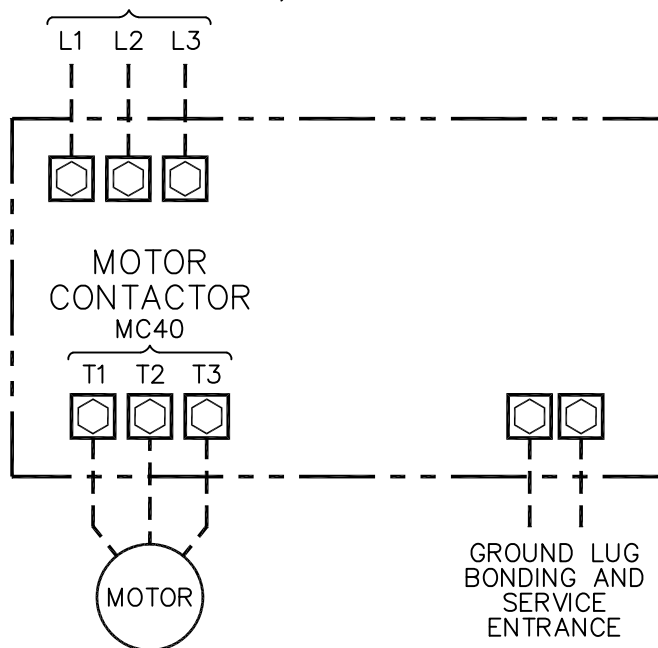
CUT ALONG DOTTED LINES BELOW



- NOTES:
1. CONTACTS SHOWN IN NO POWER CONDITION, PUMP OFF.
 2. INPUT CONNECTIONS REQUIRE DRY CONTACTS.
 3. OUTPUT CONNECTIONS ARE CONTACTS RATED FOR PILOT DUTY ONLY.
10 AMPS AT 250 VOLTS-AC MAXIMUM LOAD.
 4. AMPS AT 12 VOLTS-DC MAXIMUM LOAD.
 4. EXTERNAL CONTROL WIRE #16 GA AWG MAXIMUM.
 5. CUSTOMER CONNECTIONS ARE SHOWN BY MEANS OF DASH LINES.

REVDATE/BY	DESCRIPTION	DRAWN	DRAWN	11-18-15
05/15/17	CHANGED BOARD PART NOS.	CHECK	CHECKED	11-18-15
A	DAMA	ELIMINATED POWER COMMS HUB	APPD	APPROVED 11-18-15
FIELD CONNECTIONS, MODEL MPT700				
SOLID STATE SOFT START				
ELECTRIC FIRE PUMP CONTROLLER				
 METRATRON A Division of Hubbell Industrial Controls, Inc. 4301 Clayemene Drive, Arden, NC 27663 USA				
OPTIONS:				
HCMP7F700				
SCALE NTS			SHEET 1 OF 2	

3-PHASE
INCOMING LINE
(NORMAL SOURCE)



WIRE SIZE SERVICE ENTRANCE GROUND LUG	
MAXIMUM WIRE SIZE	TIGHTENING TORQUE (in-lb)
#6 AWG	45
#1/0 AWG	50
#250MCM AWG	325

PRESSURE SYSTEM
CONNECTION
1/2" NPT

* LINE TERMINALS – WIRE CAPACITY AND QUANTITY

MAXIMUM MOTOR HORSEPOWER					WIRE SIZE PER PHASE (75°C Cu)	TIGHTENING TORQUE (in-lb)
200–208V	220–240V	380–415V	440–480V	550–600V		
5–40	5–40	5–75	5–100	5–125	(1)#8–#3/0 AWG	120
50–75	50–75	100–125	125–150	150–200	(1)#3/0–#350MCM AWG	225
100–125	100–125	150–200	200–250	250–350	(1)#2/0–#500MCM AWG	375
					(2)#3/0–#250MCM AWG	275
150	150–200	250–300	300–400	400–500	(2)#3/0–#350MCM AWG	275
200–250	250	350	450–500	600	(3)#3/0–#400MCM AWG	375
–	–	–	–	–	–	–

* MOTOR TERMINALS – WIRE CAPACITY AND QUANTITY

MAXIMUM MOTOR HORSEPOWER					WIRE SIZE PER PHASE (75°C Cu)	TIGHTENING TORQUE (in-lb)
200–208V	220–240V	380–415V	440–480V	550–600V		
5–75	5–75	5–125	5–150	5–200	(1)#8–#300MCM AWG	275
100	100–125	150	200–250	250–300	(1)#350–#500MCM AWG	375
125–150	150	200–250	300	350–400	(2)#4/0–#350MCM AWG	275
–	200	300	350–400	500	(2)#350MCM AWG	275
200–250	250	350	500	600	(3)#250MCM–#350MCM AWG	275

NOTES:

- * 1.) FOR CORRECT FIELD WIRE SIZING, REFER TO THE NATIONAL ELECTRICAL CODE, NFPA-70.
- 2.) MOTOR CONNECTIONS SHOWN ARE TYPICAL. SINCE MOTOR CONNECTIONS VARY WIDELY, REFER TO THE MOTOR MANUFACTURER'S CONNECTION DIAGRAM FOR SPECIFIC WIRING ARRANGEMENT.



REV	DATE	BY	DESCRIPTION	DRAWN	DAMA	11-18-15
C	02/07/20	APPD	UPDATED WIRE CAPACITY AND WIRE SIZE TABLES.	CHECK	DAMA	11-18-15
FIELD CONNECTIONS, MODEL MPT700 SOLID STATE SOFT START ELECTRIC FIRE PUMP CONTROLLER						
METRON A Division of Hubbell Industrial Controls, Inc. 4301 Cheyenne Drive, Archdale, NC 27263 USA						
OPTIONS: HCMPTF700						
SCALE NTS					SHEET 2 OF 2	