

ESS PARAMETERS			
PARAMETER	DESCRIPTION	SETTING	COMMENTS
1-2	MOTOR FULL LOAD CURRENT	**A	
1-3	MOTOR kW	**kW	
1-4	LOCKED ROTOR TIME	** MIN:SEC	
1-5	LOCKED ROTOR CURRENT	***%	
1-6	MOTOR SERVICE FACTOR	***%	
2-1	START MODE	**	
2-2	START RAMP TIME	** MIN:SEC	TO MAXIMUM 15s
2-3	INITIAL CURRENT	***%	
2-4	CURRENT LIMIT	***%	TO MAXIMUM 350%
2-5	ADAPTIVE START PROFILE	**	
2-9	STOP MODE	**	
2-10	STOP TIME	** MIN:SEC	TO MAXIMUM 15s
2-11	ADAPTIVE STOP PROFILE	**	
2-12	ADAPTIVE CONTROL GAIN	**%	
5-16	RESTART DELAY	00:01 MIN:SEC	
5-17	STARTS PER HOUR	**	TO MAXIMUM 5
6-3	CURRENT IMBALANCE	LOG ONLY	
6-4	UNDERCURRENT	LOG ONLY	
6-5	OVERCURRENT	LOG ONLY	
6-6	UNDervOLTAGE	LOG ONLY	
6-7	OVERVOLTAGE	LOG ONLY	
6-10	EXCESS START TIME	TRIP STARTER	
6-11	INPUT A	LOG ONLY	
6-12	INPUT B	LOG ONLY	
6-13	NETWORK COMMS	LOG ONLY	
6-14	REMOTE KEYPAD	LOG ONLY	
6-15	FREQUENCY	TRIP STARTER	
6-16	PHASE SEQUENCE	LOG ONLY	
6-17	MOTOR OVER TEMPERATURE	TRIP STARTER	
6-18	MOTOR THERMISTOR	LOG ONLY	
6-19	SHORTED SCR	TRIP STARTER	
6-20	BATTERY/CLOCK	LOG ONLY	
7-9	RESET/ENABLE LOGIC	NORMALLY OPEN	
8-1	RELAY A FUNCTION	OFF	
8-4	RELAY B FUNCTION	TRIP STARTER	

INSTRUCTIONS FOR USE

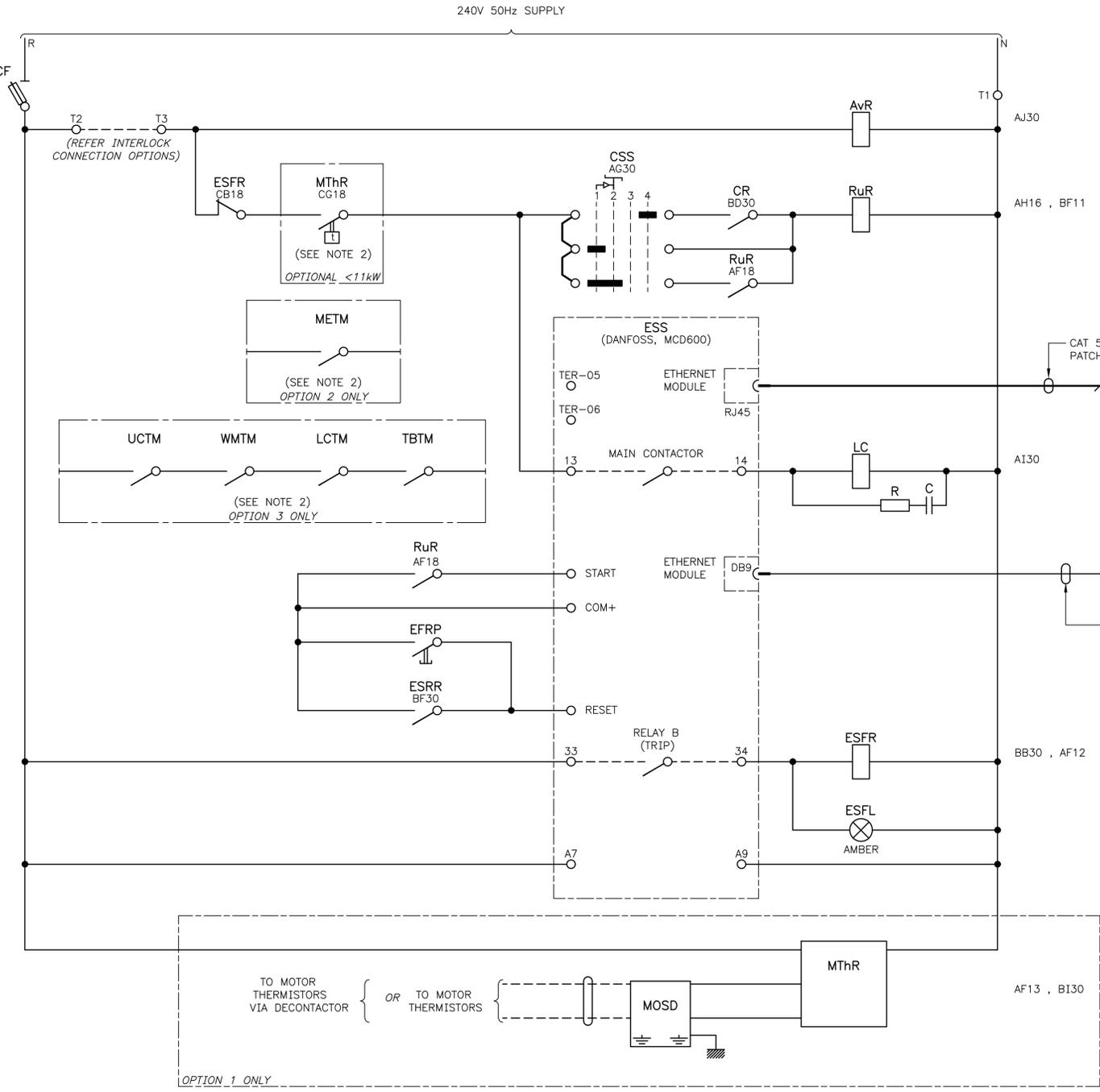
- ASTERISKS INDICATE APPLICATION SPECIFIC VALUES THAT SHALL BE NOMINATED BY DETAIL DESIGNER
- PARAMETERS NOT LISTED REMAIN AT DEFAULT VALUES
- STANDARD REGISTERS FOR PUMP MONITORING:
 - CURRENT 40005
 - AVERAGE 3 PHASE POWER 40608
- FOR ESS PARAMETERS TO FUNCTION ETHERNET CARD NEEDS TO BE SET TO LEGACY MODE BY RESETTING REGISTER 40001 TO 0
- PARAMETER GROUP 12 COMMUNICATIONS CARD SETTINGS TO BE DEFINED BY OPERATIONS TECHNOLOGY
- FOR RTD CONNECTION DETAILS REFER TO MNO1-24-8.3

CODE SCHEDULE

AvR	AVAILABLE RELAY
C	CAPACITOR
CF	CONTROL FUSE
CR	CONTROL RELAY
CSS	CONTROL SELECTOR SWITCH
D	DIODE
EFRP	ELECTRONIC SOFT STARTER FAULT RESET PUSHBUTTON
ESFL	ELECTRONIC SOFT STARTER FAULT INDICATING LIGHT
ESFR	ELECTRONIC SOFT STARTER FAULT RELAY
ESpP	EMERGENCY STOP PUSHBUTTON
ESRR	ELECTRONIC SOFT STARTER REMOTE RESET RELAY
ESS	ELECTRONIC SOFT STARTER
LC	LINE CONTACTOR
LCP	LOCAL CONTROL PANEL
LCTM	LOWER CROWN OF WINDING TEMPERATURE MONITOR
METM	MOTOR ENCLOSURE TEMPERATURE MONITOR
MOSD	MOTOR OVERTEMPERATURE SURGE DIVERTER
MThR	MOTOR THERMISTOR RELAY
R	RESISTOR
RuR	RUN RELAY
TBTM	THRUST BEARING TEMPERATURE MONITOR
UCTM	UPPER CROWN OF WINDING TEMPERATURE MONITOR
WMTM	WINDING MOTOR FRAME TEMPERATURE MONITOR

GENERAL NOTES

- DRAWN NO POWER CONDITION
- MOTOR THERMISTOR RELAY CONTACTS AND RTD CONTACTS CHANGE STATE ON ENERGIZATION
- FOR CONTACTOR MAIN POLES REFER TO MNO1-24-7.1



OPTION TABLE

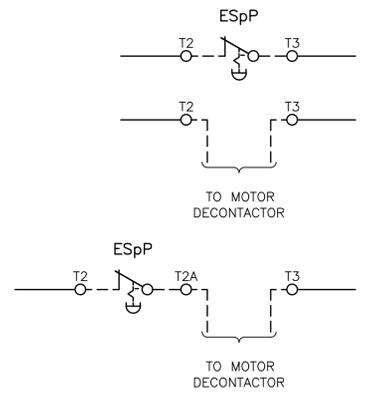
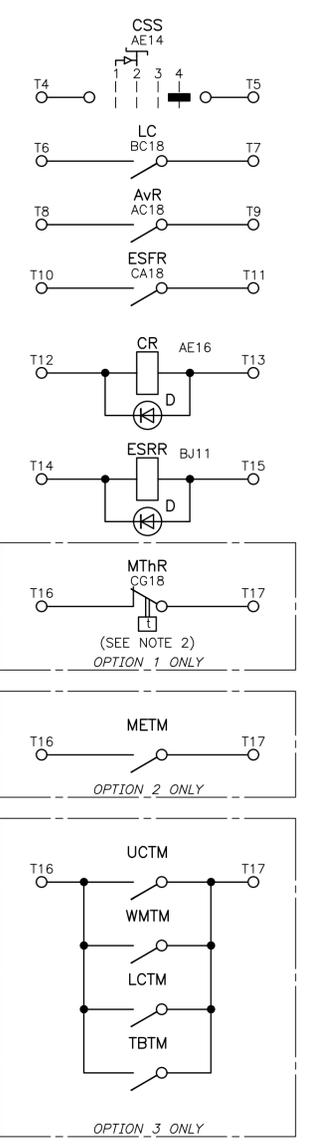
No	DESCRIPTION
1	MOTOR WITH THERMISTORS
2	MOTOR WITH 1 RESISTANCE TEMPERATURE DETECTOR (SEE INSTRUCTIONS FOR USE NOTE 6)
3	MOTOR WITH 4 RESISTANCE TEMPERATURE DETECTORS (SEE INSTRUCTIONS FOR USE NOTE 6)

CONTROL SELECTOR SWITCH

POSITION	FUNCTION
1	LOCAL START
2	LOCAL RUN
3	OFF
4	NORMAL

REFERENCE EXPLANATION

- PANEL LETTER CODE
- (P)WXYZ 41#1.1#AB34
- HORIZONTAL LOCATION
- VERTICAL LOCATION
- PART N° (IF REQUIRED)
- SHEET N°
- BUNDLE N°



E	04/2023	PROTECTION OPTIONS REVISED	PH	SW	DESIGN SURVEY	VERTICAL DATUM NONE	DES CALC T LIU	NORTH POINT	SUBMITTED 29/11/2019	RECOMMENDED 29/11/2019		ELECTRICAL STANDARD SWITCHBOARD DESIGNS SMALL PUMP STATIONS MOTOR STARTER REFERENCE - BORE ELECTRONIC SOFT STARTER - CONTROL DIAGRAM 100.1A - 263A	ORIGINAL SHEET SIZE A1	
D	02/2022	COMMUNICATION CHANGED TO ETHERNET	PH	EG	NONE			T LIU (SIGNED)	E GLIWSKI (SIGNED)	FILE				PLAN
C	03/2021	REVISED FOR MCD600; CONTROL INTERLOCKS REVISED	PH	TL	ASCON SURVEY NONE	COORDINATE SYS NONE	DES CHD E GLIWSKI	SENIOR ENGINEER - ELECTRICAL	PRINCIPAL ENGINEER - ELECTRICAL	PROJECT				CAD
B	10/2020	SDTM MODULE ADDED; MOTOR PROTECTION CIRCUIT AND AvR CONTROL WIRING REVISED	PH	EG	NONE	DES REF	DRN P HARVEY		APPROVED 28/11/2019	N JOHNSON (SIGNED)	MNO1-24-8.2		MF	
ISSUE	DATE	GRID	REVISION	DRN	REC	APPD	Q.C. CHD S MEMORY		SNR PRINCIPAL ENGINEER - ELECT					