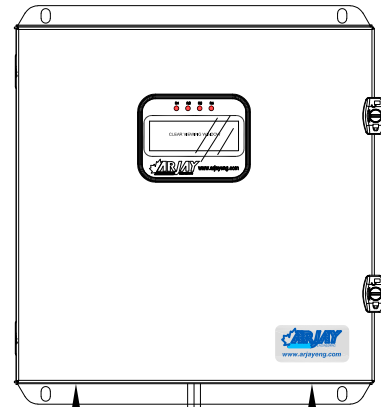


**HYDROSENSE 4410-OCM / 4420-OCM  
CONTROLLER  
ENCLOSURE**



100-230VAC  
50/60Hz  
POWER INPUT

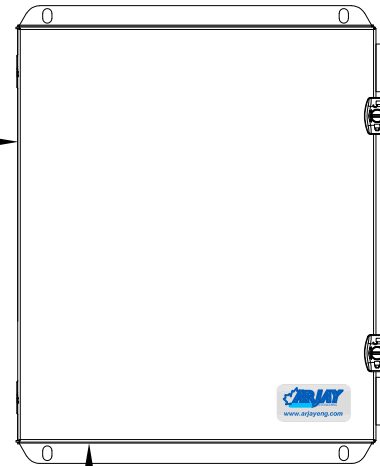
mA  
OUTPUT

ALARM  
RELAY  
OUTPUTS

MODBUS  
RS485  
OUTPUT

SHIELDED 5 CONDUCTOR (18-22 AWG) CABLE  
FROM SENSOR BLOCK ASSEMBLY  
TO 4410/4420-OCM CONTROLLER  
MAX. 100m  
PROVIDED BY CUSTOMER

**HYDROSENSE 4410-OCM / 4420-OCM  
SBA (SENSOR BLOCK ASSEMBLY)  
ENCLOSURE**



OPTIONAL  
COMPRESSED AIR

CONTINUOUS PROCESS  
FLOW

OPTIONAL  
SAMPLE TAKE OFF  
ASSEMBLY  
SEE NOTE 5

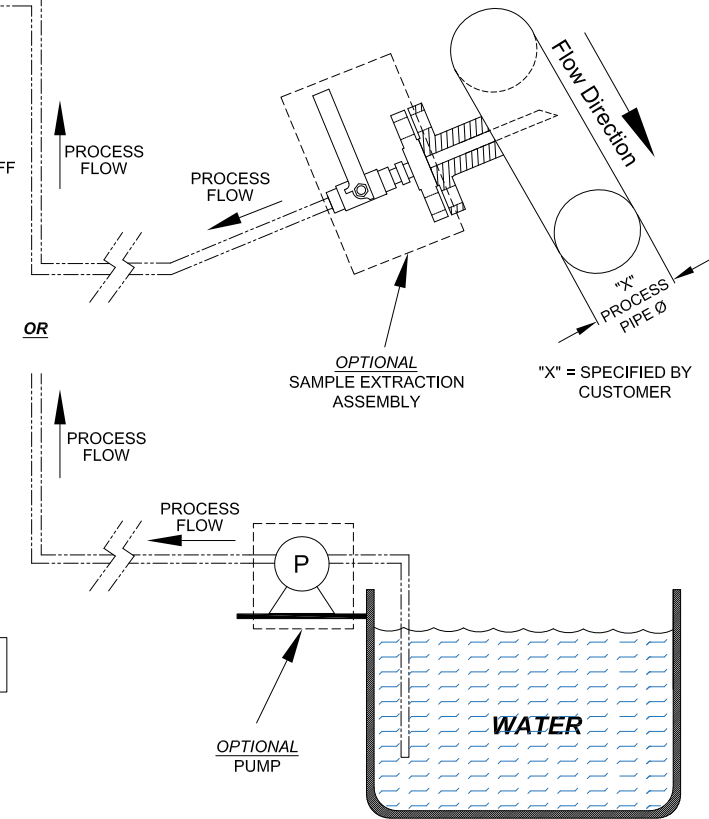
CLEAN WATER  
FLOW

SAMPLE PORT FOR  
LABORATORY TEST

PROCESS SAMPLE  
FLOW RETURN

FIELD TUBING BY  
CUSTOMER

**CUSTOMER  
PROCESS PIPE**



**GENERAL NOTES:**

1. DIMENSIONS ARE IN mm [inches].
2. TOLERANCE +1mm [0.04 inches].
3. CONTROLLER ENCLOSURE:  
MATERIAL: NEMA 4 STEEL ENCLOSURE WITH POLYESTER POWDER BLUE (RAL5015) PAINT.  
OUTSIDE DIMENSIONS: 305.8 X 304.8 X 127D (12 X 12 X 5D).  
MOUNTING DIMENSIONS: 324 X 254 (12.75 X 10).  
MOUNTING HOLE (SLOT) DIMENSION: OBLONG 0.312" x 0.500".  
APPROXIMATE WEIGHT: 8KG (17.6LB)
4. SENSOR BLOCK ENCLOSURE:  
MATERIAL: NEMA 4 STEEL ENCLOSURE WITH POLYESTER POWDER BLUE (RAL5015) PAINT.  
OUTSIDE DIMENSIONS: 355.6 X 304.8 X 152.4D (14 X 12 X 6D).  
MOUNTING DIMENSIONS: 374.7 X 254 (14.75 X 10).  
MOUNTING HOLE (SLOT) DIMENSION: OBLONG 0.312" x 0.500".  
APPROXIMATE WEIGHT: 9.1KG (20LB)
5. SAMPLE TAKE OFF ASSEMBLY (PVC) - SUPPLIED LOOSE  
- PROCESS SAMPLE INLET 1/4" FNPT.  
- CLEAN WATER INLET 1/4" FNPT FOR TEST AND CALIBRATION.  
- SAMPLE TAKE OFF POINT FOR LABORATORY ANALYSIS.

3	12/07/19	ADDED 4420-OCM MODEL NUMBER.		
2	29/08/18	REVISED.		
1	01/02/18	REVISED.		
REV	DATE	DESCRIPTION	CHKD	APPD

**REVISIONS**

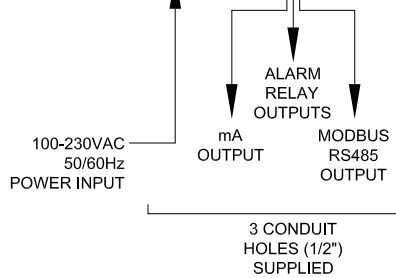
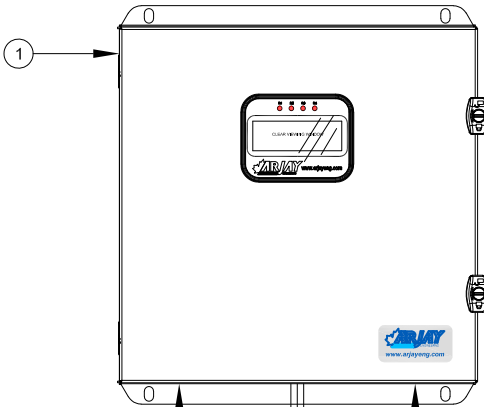


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LIMITED**

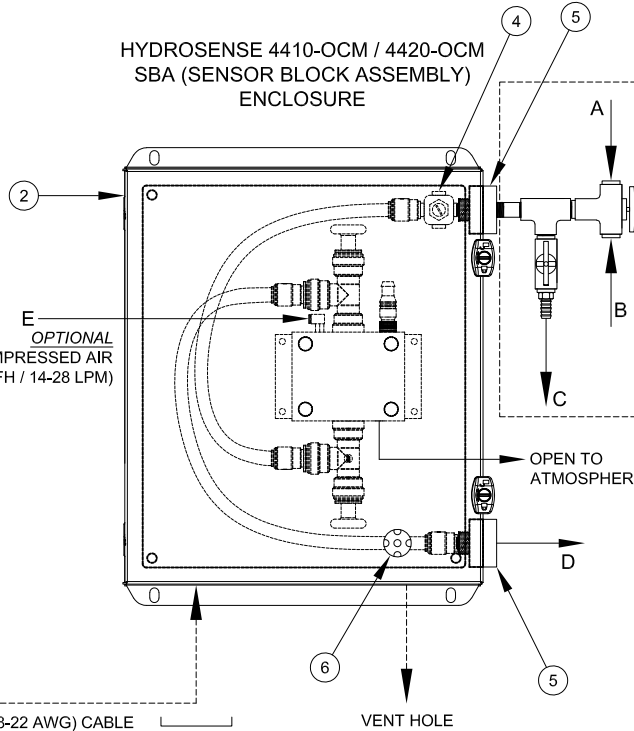
PROJECT

DWG. STATUS	BY	DATE	TITLE	SCALE	REF. DWGS.	DWG. NO.	SHT.	REV.
DRAWN	F.H.	18/12/17	4410-OCM / 4420-OCM (STANDARD) SYSTEM OVERVIEW	N.T.S.		20170420	1	3

HYDROSENSE 4410-OCM / 4420-OCM  
CONTROLLER  
ENCLOSURE



HYDROSENSE 4410-OCM / 4420-OCM  
SBA (SENSOR BLOCK ASSEMBLY)  
ENCLOSURE



OPTIONAL  
CLEAN COMPRESSED AIR  
5 - 10 PSI (30-60 SCFH / 14-28 LPM)

SHIELDED 5 CONDUCTOR (18-22 AWG) CABLE  
FROM SENSOR BLOCK ASSEMBLY  
TO 4410-OCM / 4420-OCM CONTROLLER  
MAX. 100m  
PROVIDED BY CUSTOMER

1 CONDUIT  
HOLE (1/2")  
SUPPLIED

3 SEE NOTE 5

**FLOW RATE:**  
Minimum: 1.0 L/M (0.265 gpm) (Continuous & Stable) @ 2 PSIG  
Maximum: 7.5 L/M (2.0 gpm) (Continuous & Stable) @ 100 PSIG

**INLET WATER PRESSURE:**  
Maximum 125psi, *Without* Sample Take off assembly (With PVC Bulkhead fittings) (Standard)  
Maximum 300psi, *Without* Sample Take off assembly (With SS Bulkhead fittings) (Optional)  
Maximum 125psi, *With* PVC Sample Take off assembly (Optional)  
Maximum 300psi, *With* Stainless Steel Sample Take off assembly (Optional)

MAIN COMPONENT LIST:

ITEM	DESCRIPTION	QTY.
1	4410-OCM / 4420-OCM CONTROLLER UNIT	1
2	OCM SENSOR BLOCK ASSEMBLY (SBA)	1
3	SAMPLE TAKE OFF PORT	1
4	WATER PRESSURE REGULATOR (0-25 PSIG)	1
5	PVC BULKHEAD - STANDARD (SEE NOTE 6)	2
6	BACK PRESSURE REGULATOR	1

TIE-IN POINT TABLE:

ITEM	DESCRIPTION	QTY.	WITH PVC* BULKHEAD SIZE	WITH SS* BULKHEAD SIZE
A	PROCESS SAMPLE INLET	1	1/4" FNPT	3/8" FNPT
B	CLEAN WATER INLET	1	1/4" FNPT	3/8" FNPT
C	SAMPLE TAKE OFF PORT	1	1/4" BARB	3/8" BARB
D	PROCESS SAMPLE RETURN (OUTLET)	1	1/4" FNPT	3/8" FNPT
E	AIR INLET PORT	1	1/4" OD TUBE	1/4" OD TUBE

\*WITH or WITHOUT SAMPLE TAKE OFF ASSEMBLY OPTION


GENERAL NOTES:

- DIMENSIONS ARE IN mm [inches].
- TOLERANCE +1mm [0.04 inches].
- CONTROLLER ENCLOSURE:  
MATERIAL: NEMA 4 STEEL ENCLOSURE WITH POLYESTER POWDER BLUE (RAL5015) PAINT.  
OUTSIDE DIMENSIONS: 305.8 X 304.8 X 127D (12 X 12 X 5D).  
MOUNTING DIMENSIONS: 324 X 254 (12.75 x 10).  
MOUNTING HOLE (SLOT) DIMENSION: OBLONG 0.312" x 0.500".  
APPROXIMATE WEIGHT: 8KG (17.6LB)
- SENSOR BLOCK ENCLOSURE:  
MATERIAL: NEMA 4 STEEL ENCLOSURE WITH POLYESTER POWDER BLUE (RAL5015) PAINT.  
OUTSIDE DIMENSIONS: 355.6 X 304.8 X 152.4D (14 X 12 X 6D).  
MOUNTING DIMENSIONS: 374.7 X 254 (14.75 x 10).  
MOUNTING HOLE (SLOT) DIMENSION: OBLONG 0.312" x 0.500".  
APPROXIMATE WEIGHT: 9.1KG (20LB)
- SAMPLE TAKE OFF ASSEMBLY -PVC (OPTIONAL) - SUPPLIED LOOSE IF ORDERED  
A: PROCESS SAMPLE INLET 1/4" FNPT.  
B: CLEAN WATER INLET 1/4" FNPT FOR TEST AND CALIBRATION.  
C: SAMPLE TAKE OFF POINT FOR LABORATORY ANALYSIS.

6. BULKHEAD OPTIONS:  
A: PVC (MAXIMUM 125PSI).  
B: STAINLESS STEEL (MAXIMUM 300PSI).

REV	DATE	DESCRIPTION	CHKD	APPD
3	12/07/19	REVISED AND ADDED 4420-OCM MODEL.		
2	29/08/18	REVISED.		
1	01/02/18	REVISED.		

**REVISIONS**

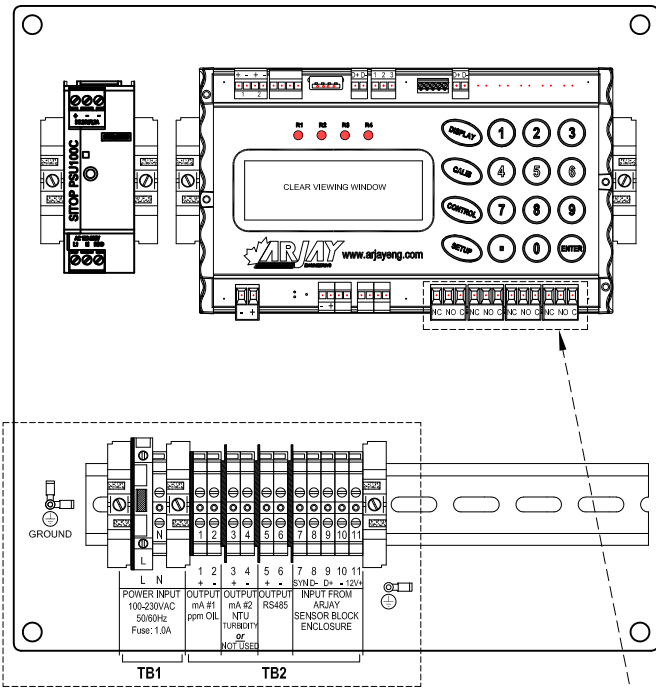


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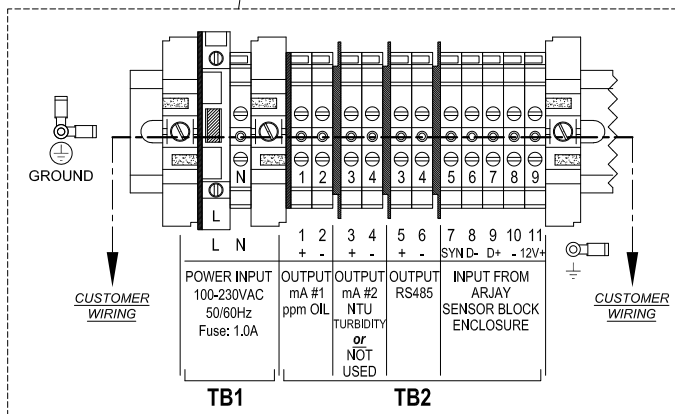
PROJECT

DWG. STATUS	BY	DATE	TITLE
	F.H.	18/12/17	4410-OCM (STANDARD) INPUT/OUTPUT OVERVIEW
CHECKED			
APPROVED			
SCALE	REF. DWGS.	DWG. NO.	SHT. REV.
N.T.S.		20170421	2 3

HYDROSENSE 4410-OCM / 4420-OCM  
CONTROLLER SUBPLATE

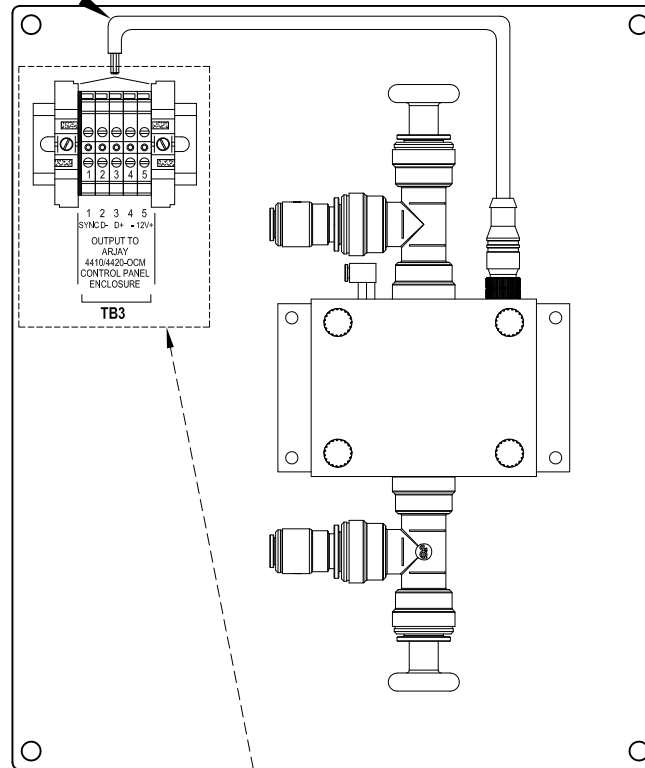


DETAIL A

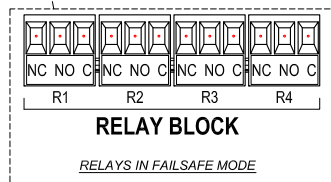


FACTORY WIRED

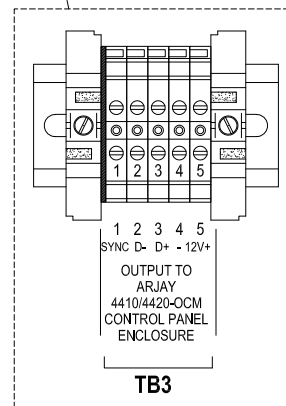
HYDROSENSE 4410-OCM / 4420-OCM  
SENSOR BLOCK SUBPLATE



DETAIL B



DETAIL C



TERMINAL BLOCK 1 (TB1)		
TERMINAL NO.	TERMINAL DESCRIPTION	USE FOR
L	L	100 - 230VAC, 50/60Hz, 0.63A - 0.31A, 1PH, 1.0A Fuse
N	N	

TERMINAL BLOCK 2 (TB2)		
TERMINAL NO.	TERMINAL DESCRIPTION	USE FOR
1	+	4-20mA OUTPUT #1 FOR ppm OIL
2	-	
1	+	4-20mA OUTPUT #2 FOR NTU TURBIDITY (OPTION) or NOT USED
2	-	
3	+	RS485 MODBUS
4	-	
5	SYNC	INPUT FROM ARJAY SENSOR BLOCK ASSEMBLY
6	D-	
7	D+	
8	-12V	
9	+12V	

RELAY BLOCK		
SPDT 3A @ 250VAC/DC RELAYS (R1, R2, R3 AND R4)		
RELAY NUMBER	TERMINAL DESCRIPTION	USE FOR
R1	NC	ppm / mg/L SETPOINT ALARM (LOW)
	NO	
	C	
R2	NC	ppm / mg/L SETPOINT ALARM (HIGH)
	NO	
	C	
R3	NC	TURBIDITY or ppm / mg/L SETPOINT ALARM (HIGH/HIGH)
	NO	
	C	
R4	NC	ATTENTION / FAULT / MAINTENANCE ALARM
	NO	
	C	

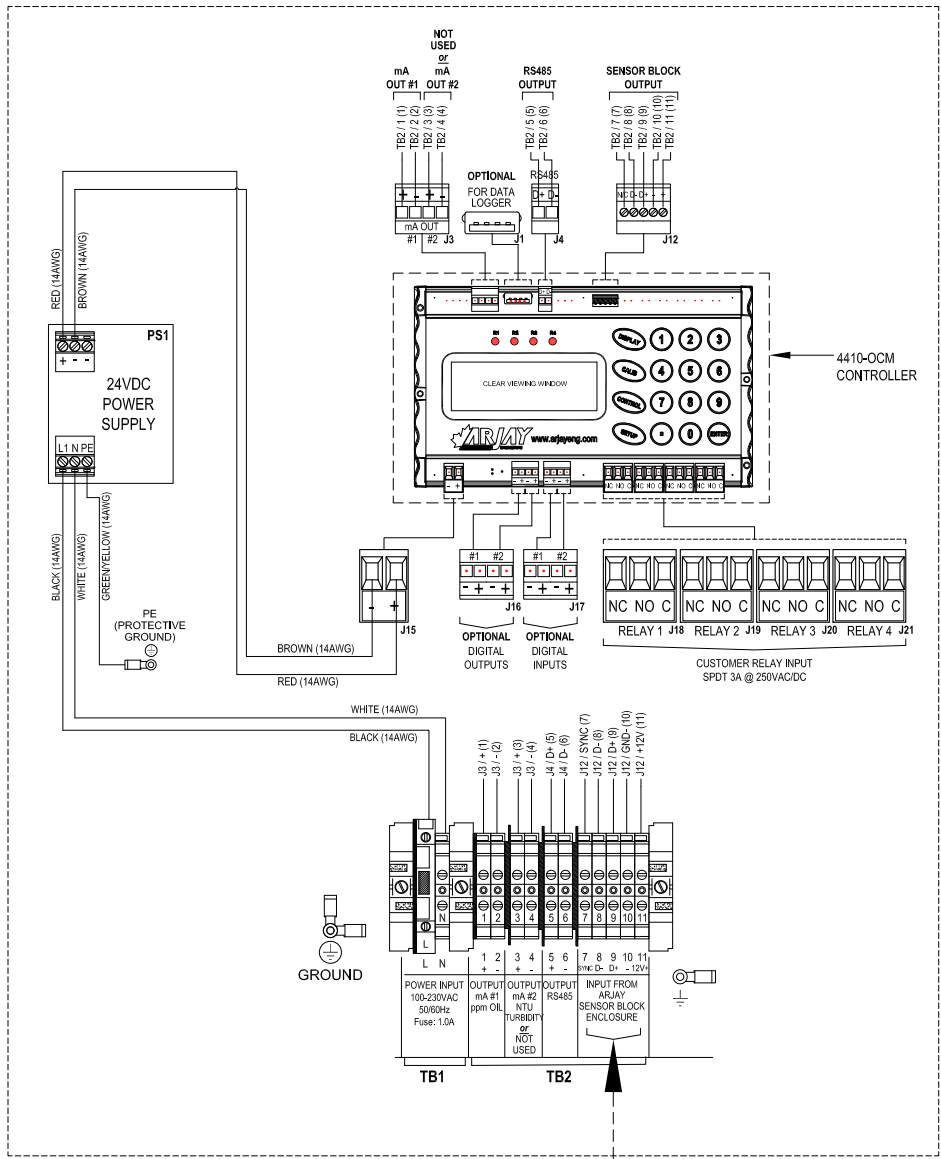
TERMINAL BLOCK 3 (TB3)		
TERMINAL NO.	TERMINAL DESCRIPTION	USE FOR
1	SYN	OUTPUT TO ARJAY 4410-OCM / 4420-OCM CONTROLLER
2	D-	
3	D+	
4	-12V	
5	+12V	

REV	DATE	DESCRIPTION	CHKD	APPD
3	12/07/19	ADDED 4420-COM MODEL NUMBER.		
2	29/08/18	REVISED.		
1	01/02/18	REVISED.		

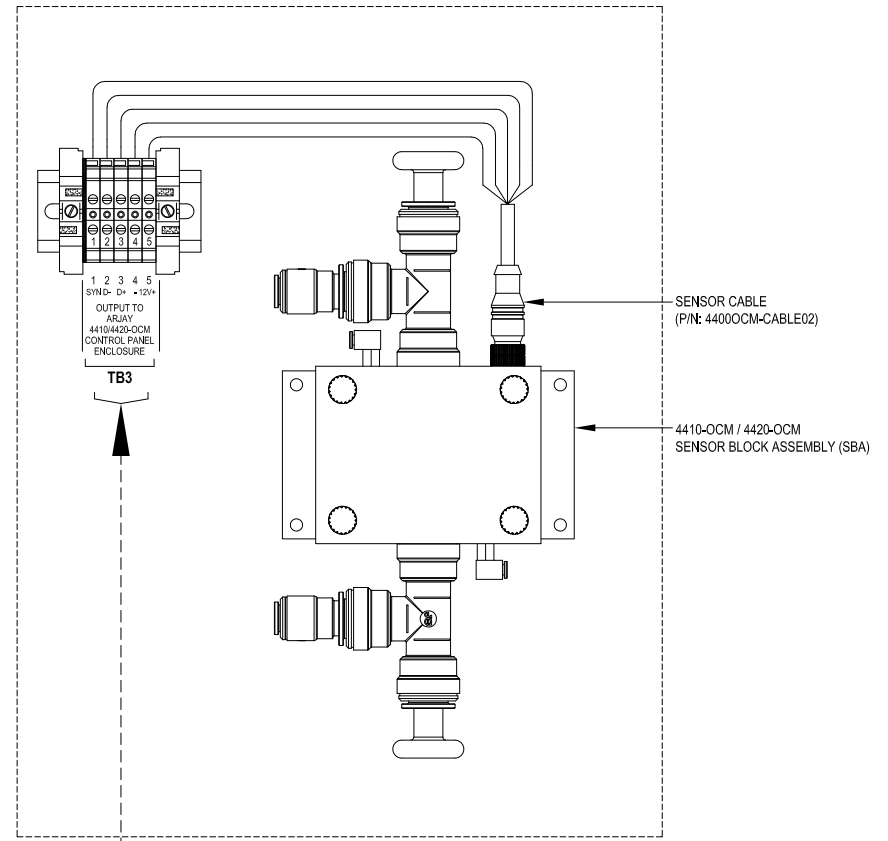
REVISIONS

		PROJECT	
		ARJAY ENGINEERING LIMITED	
DWG. STATUS	BY	DATE	TITLE
DRAWN	F.H.	18/12/17	4410-OCM / 4420-OCM (STANDARD) ELECTRICAL OVERVIEW
CHECKED			
APPROVED			
SCALE	REF. DWGS.	DWG. NO.	SHT. REV.
N.T.S.		20170422	3 3

### 4410-OCM / 4420-OCM CONTROLLER



### SBA - SENSOR BLOCK ASSEMBLY



SHIELDED 5 CONDUCTOR (18-22 AWG) CABLE FROM SENSOR BLOCK ASSEMBLY TO 4410-OCM / 4420-OCM CONTROLLER PROVIDED BY CUSTOMER

REV	DATE	DESCRIPTION	CHK'D	APP'D
3	12/07/19	ADDED 4420-COM MODEL NUMBER.		
2	29/08/18	REVISED.		
1	01/02/18	REVISED.		

**REVISIONS**

**ARJAY ENGINEERING LIMITED** PROJECT

DWG. STATUS	BY	DATE	TITLE
	F.H.	18/12/17	4410-OCM / 4420-OCM (STANDARD) FACTORY INTERNAL WIRING
CHECKED			
APPROVED			
SCALE	REF. DWGS.	DWG. NO.	SHT. REV.
N.T.S.		20170423	4 3