

PRIMARY ELEMENT SYMBOLOGY

- ANALYTICAL ELEMENT
- ULTRASONIC LEVEL ELEMENT
- ROTOMETER
- SONIC OR ULTRASONIC FLOWMETER
- MAGNETIC FLOWMETER
- THERMAL MASS DISPERSION FLOWMETER
- FLUME
- WEIR
- PROPELLER OR TURBINE METER
- FLOAT SWITCH
- TEMPERATURE ELEMENT WITH THERMOWELL
- SIGHT FLOW GLASS
- INSTRUMENT TAP ISOLATION DIAPHRAGM

CROSS REFERENCE SYMBOLOGY

- Y-3 CONTINUATION ON SHEET Y-3
- Y-3 CONTINUATION ON SHEET Y-3

ACTUATOR SYMBOLOGY

- OPERATOR ABBREVIATIONS:
M = MOTOR
P = PNEUMATIC
S = SOLENOID
- FLOAT OPERATOR
 - SPRING-OPOSED SINGLE-ACTING PNEUMATIC CYLINDER
 - DOUBLE-ACTING PNEUMATIC CYLINDER
 - PNEUMATIC DIAPHRAGM
 - PNEUMATIC DIAPHRAGM WITH POSITIONER

CONTROL SWITCH NOTATION ABBREVIATIONS

- XXXX
ACKNOWLEDGE EMERGENCY STOP
- FAIL FAILURE
- FOR FORWARD-OFF-REVERSE
- FR FORWARD-REVERSE
- FS FAST-SLOW
- HA HAND-AUTO
- HOA HAND-OFF-AUTO
- HOR HAND-OFF-REMOTE
- LL LEAD-LAG
- LLS LEAD-LAG-STANDBY
- LOR LOCAL-OFF-REMOTE
- LR LOCAL-REMOTE
- LS LEAD-STANDBY
- MA MANUAL-AUTO
- OAC OPEN-AUTO-CLOSE
- OC OPEN-CLOSE
- OO ON-OFF
- OSC OPEN-STOP-CLOSE
- RJ RUN-JOG
- RJR RUN-JOG-REVERSE
- SIL SILENCE
- SS START-STOP

INSTRUMENT SYMBOLOGY

- LOCALLY MOUNTED FIELD INSTRUMENTATION
- MOUNTED ON PANEL FRONT
- MOUNTED INSIDE PANEL
- FRONT PANEL MOUNTED ON AUXILIARY PANEL (SUBSCRIPT INDICATES PANEL)
- MOUNTED INSIDE AUXILIARY PANEL
- PILOT LIGHT
- INSTRUMENT FUNCTIONS SHARING COMMON HOUSING
- COMPLEX INTERLOCK AS DEFINED IN CONTROL DIAGRAM OR IN SPECIFICATIONS
- SHARED DISPLAY, SHARED CONTROL, FIELD MOUNTED
- SHARED DISPLAY, SHARED CONTROL, PRIMARY LOCATION - NORMALLY ACCESSIBLE TO OPERATOR
- PROGRAMMABLE LOGIC CONTROL, PRIMARY LOCATION - NORMALLY ACCESSIBLE TO OPERATOR
- PROGRAMMABLE LOGIC CONTROL, FIELD MOUNTED

VALVES

- BALL VALVE
- BUTTERFLY VALVE
- CONE VALVE
- CHECK VALVE
- DOUBLE-DISK CHECK VALVE
- BALL CHECK VALVE
- DIAPHRAGM VALVE
- GATE VALVE
- GLOBE VALVE
- KNIFE GATE VALVE
- NEEDLE VALVE
- PINCH VALVE
- PLUG VALVE
- THREE-WAY BALL VALVE
- THREE-WAY PLUG VALVE
- PRESSURE-REDUCING VALVE
- PRESSURE REGULATING VALVE
- THREE-WAY CONTROL VALVE
- PRESSURE RELIEF VALVE
- AIR-RELEASE VACUUM VALVE
A = AIR RELEASE
VAC = VACUUM

INSTRUMENT IDENTIFICATION LETTERS

	FIRST LETTER		SUCCEEDING LETTER		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	USER'S CHOICE			CONTROL	CLOSED
D	USER'S CHOICE	DIFFERENTIAL			
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)			
G	USER'S CHOICE		GLASS, VIEWING DEVICE		
H	HAND				HIGH
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME, RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	USER'S CHOICE	MOMENTARY			MIDDLE, INTERMEDIATE
N	USER'S CHOICE		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		ORIFICE, RESTRICTION		
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD		
S	SPEED FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION, MECH. ANALYSIS			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	
Z	POSITION DIMENSION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

FILE NAME = G:\111\1110823\Work_D\adm_3_M0_Ave_P12\ACADD_Schems\DB76699-Int-KL0_ Elec.dgn

USER NAME = seb	DESIGNED - JJN	REVISED -
DESIGNED - JJN	DRAWN - JJN	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/23/2014	DATE -	REVISED -

F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-4T-1	ST. CLAIR	185	158
CONTRACT NO. 76C99				
ILLINOIS FED. AID PROJECT				