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	INSTRU	IMENT AND [	DEVICE IDENTIFICATION TABLE						
	FIRST-LETTEF	?	SUCCEEDING-LETTERS						
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER				
Α	ANALYSIS OR SAMPLER		ALARM, TROUBLE						
В	BURNER FLAME				CLOSE, DECREASE (1)				
С	CONDUCTIVITY			CONTROL					
D	DENSITY	DIFFERENTIAL			OPEN, INCREASE (1)				
Ε	VOLTAGE (EMF)		SENSOR (PRIMARY ELEMENT)						
F	FLOW RATE	RATIO (FRACTION)	FAILURE						
G	GAS		GLASS, VIEWING DEVICE, GUAGE (2)	GENERATOR (ULTRASONIC)					
Н	HAND (MANUAL)				HIGH				
	CURRENT (ELECTRICAL)		INDICATE						
J	POWER	SCAN							
K	TIME	TIME RATE OF CHANGE		CONTROL STATION					
L	LEVEL		LIGHT (3)		LOW				
М	MOTOR	MOMENTARY	OPERATE, ON/OFF		MIDDLE, INTERMEDIATE				
Ν	MOISTURE			START					
0	TORQUE		ORIFACE, RESTRICTION	STOP, OVERLOAD					
Р	PRESSURE, VACUUM		POINT (TEST CONNECTION)						
Q	COMMON, QUANTITY	INTEGRATE, TOTALIZE							
R	RADIOACTIVITY		RECORD						
S	SPEED, FREQUENCY	SAFETY		SWITCH					
Т	TEMPERATURE		TRANSMITTER						
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION				
٧	VIBRATION, MECHANICAL ANALYSIS, VALVE, DAMPER (4)			VALVE, DAMPER, LOUVER					
W	WEIGHT, FORCE		WELL						
Χ	UNCLASSIFIED (5)	X AXIS	UNCLASSIFIED (5)	UNCLASSIFIED (5)	UNCLASSIFIED (5)				
Υ	EVENT, STATE, OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT					
Z	POSITION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT					

## OTES FOR INSTRUMENT AND DEVICE IDENTIFICATION TABLE:

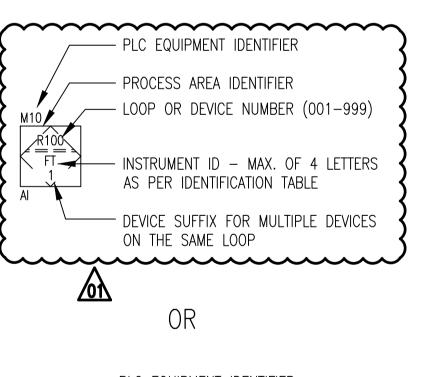
- WHEN THE B AND D LETTERS ARE TO REPRESENT AN OPEN AND CLOSED COMMAND OR POSITION, THEY ARE CURRENTLY OFTEN USED NOT AS A MODIFIER, BUT RATHER AS A READOUT OR OUTPUT FUNCTION. FOR EXAMPLE, SB RATHER THAN SCB.
- IN CURRENT DRAWINGS, THE LETTER G IS OFTEN USED TO REPRESENT A GAUGE AS IN TG (TEMPERATURE GAUGE). HOWEVER, SINCE A TEMPERATURE GAUGE USUALLY HAS A SCALE TO READ A SPECIFIC TEMPERATURE, IT WOULD MORE CORRECTLY BE CALLED AN INDICATOR (TI). GAUGE IS INCLUDED FOR HISTORICAL REASONS.
- ON CURRENT SEWPCC P&ID DRAWINGS, THE PILOT LIGHTS USUALLY OMIT THE L DESIGNATION. FOR EXAMPLE, A VALVE OPEN PILOT LIGHT IS DESIGNATED AS ZD. TECHNICALLY, THE APPROPRIATE IDENTIFIER IS ZLD, BUT ZD HAS BEEN MAINTAINED FOR HISTORICAL REASONS.
- THE USE OF V AS AN INITIAL LETTER HAS BEEN INCORRECTLY USED IN THE PAST TO REPRESENT A VALVE OR A DAMPER, AND IS MAINTAINED IN THE IDENTIFICATION TABLE DUE TO ITS COMMON USE AS SUCH. HOWEVER, THESE INSTRUMENTS SHOULD IDEALLY BE RENAMED TO THE APPROPRIATE IDENTIFIERS. FOR EXAMPLE, MOST VY INSTRUMENTS (PNEUMATIC RELAYS) ON THE CURRENT DRAWINGS COULD BE RELABELLED AS HY OR FY INSTRUMENTS.
- THE LETTER X IS TO BE DEFINED AT THE TIME OF USE, AND MAY BE USED FOR MULTIPLE DEFINITIONS WHERE NO OTHER LETTER IS APPLICABLE.

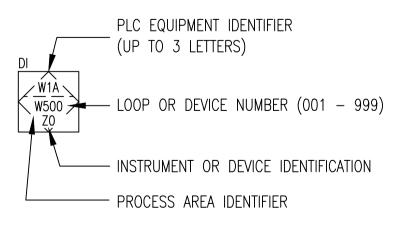
	INSTRUMENT FIELD	T T T T T T T T T T T T T T T T T T T		
IDENTIFIER	DEFINITION	IDENTIFIER		
AAH	ANALYSIS ALARM — HIGH	PSHH	PRESSURE S	
AAHH . –	ANALYSIS ALARM — HIGH—HIGH	PSL	PRESSURE S	
AE	ANALYSIS ELEMENT	PSV PT	PRESSURE S. PRESSURE TI	
AIT AK	ANALYSIS INDICATING TRANSMITTER (ANALYTIC INST.)  ANALYSIS (AMPLER) CONTROL STATION	PY	PRESSURE R	
ASH	ANALYSIS SWITCH — HIGH	SI	SPEED INDICA	
ASHH	ANALYSIS SWITCH - HIGH-HIGH	SK	SPEED CONTI	
ASY	ANALYSIS SAFETY RELAY	ST	SPEED TRANS	
AT	ANALYSIS TRANSMITTER (ANALYTIC INST.)	TE	TEMPERATURE	
BK	BURNER CONTROL STATION	TG	TEMPERATURE	
BS	BURNER FLAME SWITCH	TI	TEMPERATURE	
BV DE	BURNER VALVE DENSITY ELEMENT	TIC	TEMPERATURE TEMPERATURE	
DR	DENSITY RECORDER	TR	TEMPERATURE	
DT	DENSITY TRANSMITTER	TS	TEMPERATURE	
DX	DENSITY SOURCE $(X = SOURCE)$	TSH	TEMPERATURE	
EE	VOLTAGE ELEMENT/TRANSFORMER	TSL	TEMPERATURE	
El	VOLTAGE INDICATOR	TT	TEMPERATURE	
ET	VOLTAGE TRANSMITTER	TV	TEMPERATURE	
FE FG	FLOW ELEMENT	TW	TEMPERATURE	
FG FI	FLOW METER ULTRASONIC GENERATOR FLOW INDICATOR	TY XE	TEMPERATURE VELOCITY ELE	
FIC	FLOW INDICATING CONTROLLER	XI	VELOCITY IND	
FIT	FLOW INDICATING TRANSMITTER	XK	UNCLASSIFIED	
FQI	FLOW TOTALIZING INDICATOR	XT	POWER FACTO	
FQY	FLOW TOTALIZING / INTEGRATING RELAY	XT	VELOCITY TRA	
FR	FLOW RECORDER	XX	UNCLASSIFIED	
FRC	FLOW RECORDING CONTROLLER	YS	COMPUTER S	
FRQ FSL	FLOW RECORDING TOTALIZER FLOW SWITCH LOW	YSA YSL	STATE SAFET	
FSL FT	FLOW TRANSMITTER	ZI	POSITION IND	
FV	FLOW VALVE	ZS	POSITION SWI	
FY	FLOW COMPUTER / RELAY	ZSB	POSITION SWI	
GE	GAS ELEMENT	ZSDL	POSITION SW	
GS	GAS SWITCH MODULE	ZSH	POSITION SW	
HK	HAND CONTROL STATION	ZSL	POSITION SWI	
HS	HAND SWITCH	ZT	POSITION TRA	
HSS HV	HAND SAFETY SWITCH HAND VALVE	NOTES F	OR INSTR	
IS	CURRENT SWITCH	-	ST IDENTIFIER L	
IE	CURRENT ELEMENT/TRANSFORMER	1	BLE IS DERIVED	
	CURRENT INDICATOR		AND IS NOT EX	
ΙΥ	CURRENT RELAY			
KY	TIMER RELAY	_		
LCV	LEVEL CONTROL VALVE	4		
LE LI	LEVEL ELEMENT LEVEL INDICATOR	4		
LIC	LEVEL INDICATING CONTROLLER	1		
LIT	LEVEL INDICATING TRANSMITTER	†		
LR	LEVEL RECORDER	1		
LSL	LEVEL SWITCH LOW			
LSH	LEVEL SWITCH HIGH			
LSHL	LEVEL SWITCH HIGH/LOW	_		
LT	LEVEL TRANSMITTER	4		
LV LY	LEVEL VALVE	4		
MB	LEVEL RELAY (I/I CONVERTER)  MOTOR DECREASE OR REVERSE	1		
MD MD	MOTOR INCREASE OR FORWARD	†		
MF	MOTOR FAILURE	1		
ММ	MOTOR RUN			
NS	MOISTURE SWITCH			
PCV	PRESSURE CONTROL VALVE	_		
PE	PRESSURE ELEMENT	4		
PG PI	PRESSURE GAUGE PRESSURE INDICATOR	4		
PIC	PRESSURE INDICATING CONTROLLER	1		
PIT	PRESSURE INDICATING CONTROLLER  PRESSURE INDICATING TRANSMITTER	1		
PR	PRESSURE RECORDER	1		
PS	PRESSURE SWITCH	]		
		_		

DEVICE IDE	NTIFIERS	INSTRUME	ENT IDENTIFICATION MODIFIER
DENTIFIER	DEFINITION	IDENTIFIER	DEFINITION
PSHH	PRESSURE SWITCH HIGH (2ND STAGE)	(N)	N MULTIPLE INSTRUMENTS
PSL	PRESSURE SWITCH LOW	AA	AUDIBLE ALARM
PSV	PRESSURE SAFETY VALVE (RELIEF)	A/M	AUTO / MANUAL
PT	PRESSURE TRANSMITTER	C/H	COMPUTER / HAND
PY	PRESSURE RELAY (I/I CONVERTER)	C/L	COMPUTER / LOCAL
SI	SPEED INDICATOR	CLS	CLOSE
SK	SPEED CONTROL STATION	C/0	COMPUTER / OFF
ST	SPEED TRANSMITTER	COB	COMPUTER / OFF / BYPASS
TE	TEMPERATURE ELEMENT	СОН	COMPUTER / OFF / HAND
TG	TEMPERATURE GAUGE	COT	COMPUTER / OFF / TIME
TI	TEMPERATURE INDICATOR	DCS	DISTRIBUTED CONTROL SYSTEM
TIC	TEMPERATURE INDICATING CONTROLLER	DS	DECREASE SPEED
TIT	TEMPERATURE INDICATING TRANSMITTER	E/R	EXTEND / RETRACT
TR	TEMPERATURE RECORDER	E/S	EMERGENCY STOP
TS	TEMPERATURE SWITCH	FOR	FORWARD / OFF / REVERSE
TSH	TEMPERATURE SWITCH HIGH	H/A	HAND / AUTO
TSL	TEMPERATURE SWITCH LOW	HOA	HAND / OFF / AUTO
Π	TEMPERATURE TRANSMITTER	HOR	HAND / OFF / REMOTE
TV	TEMPERATURE VALVE	I/D	INCREASE / DECREASE
TW	TEMPERATURE THERMOWELL	INT/EXT	INTERNAL / EXTERNAL
TY	TEMPERATURE RELAY (SOLENOID VALVE OR M/P)	IS	INCREASE SPEED
XE	VELOCITY ELEMENT	LCP	LOCAL CONTROL PANEL
XI	VELOCITY INDICATOR	LD	LOCKABLE DISCONNECT
XK XT	UNCLASSIFIED CONTROL STATION (X = FIRE)  POWER FACTOR TRANSMITTER	LJB	LOCAL JUNCTION BOX
XT	VELOCITY TRANSMITTER (X = VELOCITY)	L/0	LOCAL / OFF
XX	UNCLASSIFIED (XX = ALARM ANNUNCIATOR)	LOR	LOCAL / OFF / REMOTE
YS	COMPUTER SWITCH	LOS	LOCK OFF STOP
YSA	STATE SAFETY ALARM	L/R	LOCAL / REMOTE
YSL	STATE SAFETY LIGHT	LSR	LOCAL / STOP / REMOTE
ZI	POSITION INDICATOR	MCC	MOTOR CONTROL CENTER
ZS	POSITION SWITCH	0/A	OFF / AUTO
ZSB	POSITION SWITCH CLOSED (LIMIT SWITCH)	0/C	OPEN / CLOSE
ZSDL	POSITION SWITCH OPEN (LIMIT SWITCH)	O/M	OFF / MAINTENANCE
ZSH	POSITION SWITCH HIGH	0/0	OFF / ON
ZSL	POSITION SWITCH LOW	OPN	OPEN
ZT	POSITION TRANSMITTER	RST	RESET
NOTEC E		RTD	RESISTIVE TEMPERATURE DEVICE
NOTES FO	OR INSTRUMENT FIELD DEVICE IDENTIFIERS:	SEL	SELECTOR
1. THE LAS	T IDENTIFIER LETTER IS IN SOME CASES OPTIONAL (EG. FSL)	S/F	SLOW / FAST
	BLE IS DERIVED FROM THE INSTRUMENT & DEVICE IDENTIFICATION	SOF	SLOW / OFF / FAST
	ND IS NOT EXHAUSTIVE.	SOL	SOLENOID
		S/S	START / STOP
		S/W	SUMMER / WINTER
		TAH	TEMPERATURE ALARM HIGH
		TAL	TEMPERATURE SWITCH LUICH
		TSH	TEMPERATURE SWITCH LOW
		TSL T/C	TEMPERATURE SWITCH LOW THERMOCOUPLE
		T/C VIB	VIBRATION
		VID	VIDIATION

+	N MULTIPLE INSTRUMENTS	(N)
1	AUDIBLE ALARM	AA
1	AUTO / MANUAL	A/M
┪	COMPUTER / HAND	C/H
1	COMPUTER / LOCAL	C/L
┨	CLOSE	CLS
1	COMPUTER / OFF	C/0
$\dashv$	COMPUTER / OFF / BYPASS	COB
$\dashv$	COMPUTER / OFF / HAND	СОН
┨		COT
$\dashv$	COMPUTER / OFF / TIME  DISTRIBUTED CONTROL SYSTEM	
$\dashv$	DECREASE SPEED	DCS DS
$\dashv$	EXTEND / RETRACT	E/R
$\dashv$	EMERGENCY STOP	E/S
$\dashv$	FORWARD / OFF / REVERSE	FOR
$\dashv$	HAND / AUTO	H/A
$\dashv$	HAND / OFF / AUTO	HOA
$\dashv$	HAND / OFF / REMOTE	HOR
$\dashv$	INCREASE / DECREASE	I/D
$\dashv$	INTERNAL / EXTERNAL	INT/EXT
$\dashv$	INCREASE SPEED	IS
$\dashv$	LOCAL CONTROL PANEL	LCP
$\dashv$	LOCKABLE DISCONNECT	LD
$\dashv$	LOCAL JUNCTION BOX	LJB
┨	LOCAL / OFF	L/0
┨	LOCAL / OFF / REMOTE	LOR
1	LOCK OFF STOP	LOS
1	LOCAL / REMOTE	L/R
┨,	LOCAL / STOP / REMOTE	LSR
<b>₹</b>	MOTOR CONTROL CENTER	MCC
<b>1</b>	OFF / AUTO	O/A
1(	OPEN / CLOSE	0/C
<b></b>	OFF / MAINTENANCE	0/M
7 }	OFF / ON	0/0
<b>1</b>	OPEN	OPN .
7(	RESET	RST
] \	RESISTIVE TEMPERATURE DEVICE	RTD
1	SELECTOR	SEL
	SLOW / FAST	S/F
	SLOW / OFF / FAST	SOF
	SOLENOID	SOL
	START / STOP	s/s
	SUMMER / WINTER	S/W
	TEMPERATURE ALARM HIGH	TAH
	TEMPERATURE ALARM LOW	TAL
	TEMPERATURE SWITCH HIGH	TSH
] (	TEMPERATURE SWITCH LOW	TSL
] (	THERMOCOUPLE	T/C
(	VIBRATION	VIB

R	INSTRUMENT FIELD	
	DEVICE NUMBERING	
	INSTRUMENT IDENTIFICATION  MODIFIER	
	PROCESS AREA IDENTIFIER  LOOP OR DEVICE NUMBER (001–999)	
	FAH P301	
	INSTRUMENT ID — MAX. OF 4 LETTERS AS PER IDENTIFICATION TABLE	
	DEVICE SUFFIX FOR MULTIPLE DEVICES ON THE SAME LOOP	
	<u>CONTROL SYSTEM (DCS)</u>	
	<u>POINT TAG NUMBERING</u>	
	COMPUTER SYSTEM EQUIPMENT	
	LOCATION IDENTIFIER  (2 LETTERS)	
	P301 LOOP OR DEVICE NUMBER (001 – 999)	
	INSTRUMENT OR DEVICE IDENTIFICATION	
	PROCESS AREA IDENTIFIER	
	OR	
	COMPUTER SYSTEM EQUIPMENT LOCATION IDENTIFIER (2 LETTERS)	
	PROCESS AREA IDENTIFIER	
	P301 LOOP OR DEVICE NUMBER (001 – 999)  FT INSTRUMENT OR DEVICE IDENTIFICATION  DEVICE SUFFIX FOR MULTIPLE DEVICES	
	ON THE SAME LOOP	
	<u>PLC POINT TAG</u>	
	NUMBERING	
	PLC EQUIPMENT IDENTIFIER	
	PROCESS AREA IDENTIFIER	





					•))	SNC-LAVALIN INC.  148 Nature Park Way Winnipeg, MB, Canada R3P 0X7	ENGINEER'S SEAL	Winnine WATE
					SNC+LAVALIN	204-786-8080		Winnipeg WATE
					DESIGNED BY: EMR	CHECKED BY: EFB	FOR	SOUTH END WATER F
					DRAWN BY:	APPROVED BY:	REFERENCE	
					DS	CJR		PROCESS AND
					SCALE: NTS	RELEASED FOR CONSTRUCTION	1 ONLY	LEGEND
						BY:	01121	
01	ADDED SYMBOLS	2010/10/01	TMC	CJR	DATE: 2004/01/23	DATE:		OLTY, DRAWING NUMBER
00	ISSUED FOR CITY USE	2007/02/26	EFB	_	CONSULTANT NO.:		1	CITY DRAWING NUMBER $1 - \bigcap 1 \bigcap \bigcap A - \bigwedge \bigcap A$
$\neg$					<b>1</b> 1195//	7_0112_4QDD_0101		I I ( ) I ( ) / ( ) ( ) ( ) (