				ANALOG INPUTS																												DIGITAL INPUT										ANALOG OUTPUT						DIGITAL OUTPUT															
ITEM	QTY	FPU	DESCRIPTION	EVAPORATOR LEAVING WATER TEMPERATURE(*)	EVAPORATOR ENTERING WATER TEMPERATURE (*)	CONDENSER ENTERING WATER TEMPERATURE (*)	CONDENSER LEAVING WATER TEMPERATURE (*)	SUPPLY WATER TEMPERATURE (*)	RETURN WATER TEMPERATURE (*)	SECONDARY SUPPLY WATER TEMPERATURE (*)	SECONDARY RETURN WATER TEMPERATURE (*)	COOLING TOWER BYPASS VALVE POSITION FEEDBACK(*)	COOLING TOWER MAKEUP VALVE POSITION FEEDBACK(*)	COOLING TOWERISOLATION VALVE POSITION FEEDBACK(*)	CHILLER BYPASS VALVE POSITION FEEDBACK(*)	EVAPORATOR ISOLATING VALVE POSITION FEEDBACK(*)	CONDENSER ISOLATING VALVE POSITION FEEDBACK(*)	WATER PRESSURE (*)	EVAPORATOR WATER FLOW	EVAPORATOR WATER POWER	CONDENSER WATER FLOW	CONDENSER WATER POWER	WATER DIFFERENTIAL TEMPERATURE(*)	WATER DIFFERENTIAL PRESSURE(*)	HUMIDIFIER FEEDBACK	ROOM DIFFERENTIAL PRESSURE TRANSMITTER(*)	OUTDOOR TEMPERATURE (*)	OUTDOOR HUMIDITY (*)	PUMP / FAN MOTOR VFD FEEDBACK (**)	SMOKE DETECTOR/FIRE ALARM (**)	LOCAL / REMOTE FROM CHILLER CP (AUXILIARY CONTACT)(**)	STATUS ON/OFF (AUXILIARY CONTACT)(**)	GENERAL ALARM (AUXILIARY CONTACT)(**)	END SWITCHES (VALVE OR DAMPER)(*)	STATUS (WATER DIF.PRESSURE SWITCH) (*)	FLOW SWITCH (*)	MANUAL/AUTO(**)	VFD / EC MOTOR GENERAL ALARM	COOLING TOWER BASIN LEVEL (***)	CHEMICAL TREAMTENT (***)	MAKE UP VALVE MODULATION (0-10VDC)	COOLING TOWER ISOLATION VALVE MODULATION (0-10VDC)	CHILLER BYPASS VALVE MODULATION (0-10VDC)(*)	EVAPORATOR ISOLATING VALVE MODULATION (0-10VDC)(*)	CONDENSER ISOLATING VALVE MODULATION (0-10VDC)(*)	PUMP / FAN VFD ADJUSTMENT(***)	START/STOP (*)	VFD / EC MOTOR ON/OFF COMMAND (4)	OPEN/CLOSE MAKE UP BUTTERFLY VALVE (**4)	OPEN/CLOSE COOLING TOWER BUTTERFLY VALVE (**4)	ENABLE/DISABLE(***)	MULTIMITER MODBUS RTU	BACNET IP integration	AI	AO	DI	DO	TOTAL NEEDED POINTS UIs and AOs	TOTAL NEEDED POINTS BOs	TOTAL AVAILABLE POINTS UIs and AOs	TOTAL AVAILABLE POINTS BOs	SPARE POINTS (%) UIs and AOs	SPARE POINTS (%) BOs	VIP 363-HOA	VIXIO-965-HOA	Delta MUX
			MECHANICAL SYSTEMS																																																																		
1	2	FPU-CHILLER	VARIABLE FLOW WATER COOLED CHILLERS	2	2	2	2							2	2	2		2	2	2	2									2	2	2										2	2	2					2		2	22	6	6	2										
2	1		CHILLED WATER MAIN SENSORS					1	1								1									1	1											4															5	0	4	0									
3	3		SECONDARY CHILLED WATER RISERS								3												3																													3	6	0	0	0	79	8	90	42	13.92%	425.0%	1	6	
4	3		CHILLED WATER PUMPS WITH VFD																				3					3								3	3						3		3							6	3	6	3									
5	3		CONDENSER WATER PUMPS WITH VFD																				3					3								3	3						3		3							6	3	6	3									
6	2	FPU-CTS	COOLING TOWER WITH VARIABLE SPEED FAN			2	2	1	1			2	2	4				1										4								4	4	8	4	2	4	2			4		4				19	12	20	4	51	4	62	30	21.57%	650.0%	1	4	
			Total points	2	2	4	4	2	2	0	3	2	2	4	2	2	2	2	2	2	2	2	0	9	0	0	1	1	10	0	2	2	2	0	0	0	10	10	8	8	2	4	4	2	2	10	0	10	0	0	2	0	5	64	24	42	12	130	12	152	72			2	10	0

CHILLED Water PLANT to have one Native BACNET IP DDC (Alerton ACM or VIP+EXP) with built in H/O/A switch for Analog and Binary outputs, AOs should have Potentiometer.

ALL DDCs should be native BACnet IP abd have built in H/O/A switch for Analog and Binary outputs, AOs should have Potentiometer.