ตั้งค่า 1 คอมฯ มี 2 ฝา CRII และ 2 พัดลมคอนเดนเซอร์

EWCM_436D_CRII_MSK635 / EWCM_436D_CRII_MSK635

5/6/2020

ID	Desc.	Unit	Min	Max	Def	User
Group Name: Configuration .						
Ert	Select refrigerant type	num	0	16	0	0
CPn	Number of compressor steps per circuit	num	0	4	1	0
CPE	Default regulator power value when suction prob	num	0	4	1	1
nS	Number of solenoid coil CRII compressor	num	2	3	2	2
nFn	Number of digital fans	num	0	2	1	2
nFA	Number of analogue fans	num	0	1	1	0
FtE	Enable discharge probe	num	0	1	1	1
CtE	Enable suction probe	num	0	1	0	1
Eet	Enable esternal temperature probe	num	0	1	0	0
Elr	Enable subcooling probe	num	0	1	0	0
01u	Configuration of LED 1	num	0	12	1	1
02u	Configuration of LED 2	num	0	12	3	0
03u	Configuration of LED 3	num	0	12	4	3
04u	Configuration of LED 4	num	0	12	6	4
05u	Configuration of LED 5	num	0	12	10	0
06u	Configuration of LED 6	num	0	12	11	10
07u	Configuration of LED 7	num	0	12	12	11
Group Name: Allocation Analogue Inputs .						
01P	Analogue input configurability 1	num	0	4	0	4
02P	Analogue input configurability 2	num	0	4	0	3
03P	Analogue input configurability 3	num	0	2	1	1
04P	Analogue input configurability 4	num	0	2	2	2
05P	Analogue input configurability 5	num	0	4	3	0
Group Name: Allocation Digital Inputs .						
iO1	Configurability of digital input 1	num	-11	11	-1	0
iO2	Configurability of digital input 2	num	-11	11	-2	0
iO3	Configurability of digital input 3	num	-11	11	-6	0
iO4	Configurability of digital input 4	num	-11	11	-8	0
iO5	Configurability of digital input 5	num	-11	11	-7	0
iO6	Configurability of digital input 6	num	-11	11	0	0
Group Name: Allocation Analogue Outputs .						
03n	Analogue output configurability 1	num	-9	10	10	10
04n	Analogue output configurability 2	num	-9	10	0	0
05n	Analogue output configurability 3	num	0	1	0	0
Group Name: Allocation Digital Outputs .						
d01	Configurability of digital output 1	num	-9	9	1	1
d02	Configurability of digital output 2	num	-9	9	3	0
d03	Configurability of digital output 3	num	-9	9	7	7
d04	Configurability of digital output 4	num	-9	9	0	8
d05	Configurability of digital output 5	num	-9	9	0	0
Group Name: Compressor .						
SP1	Pressure setpoint, suction section	bar	0	10	3.20	3
bHo	Upper band 2 neutral zone	bar	0.1	5	0.25	1
bH	Upper band 1 neutral zone	bar	0.1	5	0.15	0.1
bL	Lower band 1 neutral zone	bar	0.1	5	0.15	0.1

Group Name: Compressor .						
bLo	Lower band 2 neutral zone	bar	0.1	5	0.25	1
dH	Time over upper band 1 for compressor capacity i... s	sec	0	600	30	1
dHo	Time over upper band 2 for compressor capacity ... s	sec	0	600	15	1
dL	Time under lower band 1 for compressor capacity ... s	sec	0	600	10	1
dLo	Time under lower band 2 for compressor capacity... s	sec	0	600	5	1
os1	Offset on set point	bar	-10	10	0	0
Group Name: Compressor 1 - Safety Times .						
oF1	OFF to ON compressor safety time, suction secti... s	sec	0	999	60	60
oF2	OFF to ON compressor safety time, suction secti... s	sec	0	999	60	60
oF3	OFF to ON compressor safety time, suction secti... s	sec	0	999	60	60
oF4	OFF to ON compressor safety time, suction secti... s	sec	0	999	60	60
on1	ON to ON compressor safety time, suction section 1	sec	0	999	60	60
on2	ON to ON compressor safety time, suction section 2	sec	0	999	60	60
on3	ON to ON compressor safety time, suction section 3	sec	0	999	60	60
on4	ON to ON compressor safety time, suction section 4	sec	0	999	60	60
Group Name: CRII compressor .						
tOf	Timeout CRII compressor inactivity before switc... s	sec	0	120	60	60
CrE	Number of solenoid coil CRII active in case of ...	num	0	3	1	1
tAc	Time over upper band 1 for solenoid coil CRII a... s	sec	10	999	10	10
tdc	Time under lower band 1 for solenoid coil CRII ... s	sec	10	999	10	10
oFc	CRII protection time OFF ON	sec	0	999	60	60
onc	CRII protection time ON ON	sec	0	999	60	60
onS	Minimum time solenoid coil CRII	sec	5	100	5	1
oFS	Minimum time solenoid coil CRII	sec	5	100	5	9
Group Name: Fans .						
SP2	Pressure setpoint, delivery section	bar	0	50	17	17
FBn	Proportional pressure band, delivery section	bar	0	50	2	2
Fdn	Fan enabling delay from acknowledgement	sec	0	600	5	5
FdF	Fans deactivation delay	sec	0	600	5	5
oS2	Offset on set point	bar	-50	50	0	0
Group Name: Fans - Inverter .						
Ftr	Fans PID sampling time	sec	0	255	10	10
Fti	Fans PID integral time	sec	0	999	0	0
Ftd	Fans PID derivative time	sec	0	999	0	0
Ftt	Fans PID anti-windup	sec	0	999	7	7
Fta	Fans 'PID maximum percentage change per second	sec	0	100	0	0
FAP	Select PID automatic or manual mode	num	0	1	1	1
FPE	Fans output percentage in case of probe error	num	0	100	100	100
FLP	Fans output minimum percentage	num	0	100	0	0
Group Name: Floating set-point .						
EdC	Selection of dynamic condensation setpoint	num	0	1	0	0
dtC	Dynamic condensation setpoint temperature offset	°C	0	20	10	10
CSH	Floating condensation set-point maximum value	bar	5	30	17	17
CSL	Floating condensation set-point minimum value	bar	5	30	13	13
oAC	Floating condensation set-point maximum offset	°C	-50	50	10	10
oSC	Floating condensation set-point minimum offset	°C	-50	50	0	0
PSb	Sub-cooling setpoint 1 for dynamic condensation...	°C	-50	50	6	6
nSb	Sub-cooling setpoint 2 for dynamic condensation...	°C	-50	50	3	3
HSb	Subcooling maximum band	°C	-50	50	8	8
LSb	Subcooling minimum band	°C	-50	50	1	1

Group Name: Floating set-point .						
HEt	Maximum external temperature for floating conde..	°C	0	50	28	28
Group Name: Alarms .						
dHA	High pressure alarm activation threshold in del..	bar	0	30	22	35
dHd	High pressure alarm activation delta in delivery	bar	0.1	1	0.5	0.5
SLA	Low pressure alarm activation threshold, suctio..	bar	0	8	0.5	0.5
SLd	Low pressure alarm activation delta, suction se..	bar	0.01	1	0.2	0.1
dtA	High temperature alarm activation threshold in ..	°C	0	110	100	120
dtd	High temperature alarm activation delta in deli..	°C	0.1	50	10	10
dtt	Bypass time for high pressure alarm in delivery	min	0	50	5	5
oLt	Overheating lower threshold	°C	-100	100	2	2
oHt	Overheating upper threshold	°C	-100	100	2	2
odt	Overheating alarm hysteresis	°C	0.1	50	2	2
oAd	Overheating alarm delay	min	0	60	5	5
Group Name: Serial communication .						
CF01	Select COM1 protocol	num	0	1	1	1
CF20	Eliwell protocol controller address	num	0	14	0	0
CF21	Eliwell protocol controller family	num	0	14	0	0
CF30	Modbus protocol controller address	num	1	255	1	1
CF31	Modbus baud rate protocol	num	0	7	3	3
CF32	Modbus parity protocol	num	1	3	1	1
Group Name: Default settings .						
CF60	Customer code 1	num	0	999	0	0
CF61	Customer code 2	num	0	999	0	0
Group Name: I/O configuration .						
CL0	AIL1 analogue input type	num	0	8	2	0
CL1	AIL2 analogue input type	num	0	8	2	0
CL2	AIL3 analogue input type	num	0	7	3	5
CL3	AIL4 analogue input type	num	0	7	3	5
CL4	AIL5 analogue input type	num	0	8	2	0
CL10	AIL3 analogue input fullscale value	°C/bar	-5	999	70	70
CL11	AIL3 analogue input start of scale value	°C/bar	-5	70	-5	-5
CL12	AIL4 analogue input fullscale value	°C/bar	0	999	30	30
CL13	AIL4 analogue input start of scale value	°C/bar	-50	30	0	0
CL20	AIL1 analogue input differential	°C	-12	12	0	0
CL21	AIL2 analogue input differential	°C	-12	12	0	0
CL22	AIL3 analogue input differential	°C/bar	-12	12	0	0
CL23	AIL4 analogue input differential	°C/bar	-12	12	0	0
CL24	AIL5 analogue input differential	°C	-12	12	0	0
CL60	AOL analogue output	num	0	1	0	0
Group Name: Functions .						
Ui26	Key hold time to enable function	ms	0	999	350	350
Group Name: Password						
Ui27	Installation engineer password	num	0	255	1	1
Ui28	Manufacturer password	num	0	255	2	2

Pressure sensor ": เขียว = GN , ดำ=5VDC , ขาว =AI

5.5. BIOS menu

5.5.1. BIOS "Status" menu

กด F1+F3 เจอ 400d กด set จะเจอ Ai ให้เลื่อนศรขึ้นลง

Ai	: AiL1 ,AiL2,AiL3,AiL4,AiL5	CONTROLLER analog inputs
di	: diL1 ,diL2,diL3,diL4,diL5	Digital inputs
Ao	: tCL1,AOL1 ,AOL2,AOL3,AOL4,AOL5	Analog outputs
dO	: dOL1 ,dOL2,dOL3,dOL4,dOL5	Digital outputs
CL	: HOUr,dAtE,YEAr	Clock

5.5.2. BIOS programming menu

กด F2+F4 เจอ 400d กด set จะเจอ Par ให้เลื่อนศรขึ้นลง จะเจอ CL

Par : CL , CF , UI

FnC

PASS

Group Name: I/O configuration .						
CL0	AIL1 analogue input type	num	0	8	2	0
CL1	AIL2 analogue input type	num	0	8	2	0
CL2	AIL3 analogue input type	num	0	7	3	5
CL3	AIL4 analogue input type	num	0	7	3	5
CL4	AIL5 analogue input type	num	0	8	2	0
CL10	AIL3 analogue input fullscale value	°C/bar	-5	999	70	70
CL11	AIL3 analogue input start of scale value	°C/bar	-5	70	-5	-5
CL12	AIL4 analogue input fullscale value	°C/bar	0	999	30	30
CL13	AIL4 analogue input start of scale value	°C/bar	-50	30	0	0
CL20	AIL1 analogue input differential	°C	-12	12	0	0
CL21	AIL2 analogue input differential	°C	-12	12	0	0
CL22	AIL3 analogue input differential	°C/bar	-12	12	0	0
CL23	AIL4 analogue input differential	°C/bar	-12	12	0	0
CL24	AIL5 analogue input differential	°C	-12	12	0	0
CL60	AOL analogue output	num	0	1	0	0
Group Name: Functions .						
Ui26	Key hold time to enable function	ms	0	999	350	350
Group Name: Password						
Ui27	Installation engineer password	num	0	255	1	1
Ui28	Manufacturer password	num	0	255	2	2

5.6. A/CRII application menu

5.6.1. A/CRII status menu

กด set จะเจอ SP1 ให้เลื่อนศรขึ้นลง **F4⇒SEt⇒SP1**

SEt	SP1	Suction pressure setpoint
	SP2	Discharge pressure setpoint
	SP01	Offset suction pressure
	SP02	Offset discharge pressure
Ai	tSC	Evaporating temperature
	PSC	Evaporating Pressure
	tCd	Condensing temperature
	PCd	Condensing Pressure
	tES	Ambient temperature
	tLr	Liquid temperature
	tdS	Discharge temperature
	Sb	Subcooling temperature
	tSC	Suction gas temperature

	SHt	Super heat
SCr	StCr	CR state
	hS1	Number of hours CR1 operating
	dS1	Number of days CR1 operating
	hS2	Number of hours CR2 operating
	dS2	Number of days CR2 operating
	hS3	Number of hours CR3 operating
	dS3	Number of days CR3 operating
SC1	StC1	Compressor 1 state
	hC1	Number of hours operating
	dC1	Number of days operating
SC2	StC2	Compressor 2 state
	hC2	Number of hours operating
	dC2	Number of days operating
SC3	StC3	Compressor 3 state
	hC3	Number of hours operating
	dC3	Number of days operating
SC4	StC4	Compressor 4 state
	hC4	Number of hours operating
	dC4	Number of days operating
SFi	StFi	
	Pid	
SF1	StF1	Fan 1 state
	hF1	
	dF1	
SF2	StF2	Fan 2 state
	hF2	
	dF2	
rEL	idF	
	rEL	
	tAb	
	CrCH	
	CrC	
HiSt	HYSP	Alarm list memory locations
	HYSC	Alarm list alarm numbers
	HYSd	Alarm list date
	HYSt	Alarm list time
	HiSF	Alarm list number of stored error
AL	Er01 ... Er19	

Alarms table

		Action	
Er01	Suction pressure probe error (see para. CPE and CRE)	Comp+CR Lock	Auto reset
Er02	Discharge pressure probe error	Comp+CR Lock	Auto reset
Er03	External temperature probe error	Floating condensation loc	Auto reset
Er04	Liquid return temperature probe	Sub-cooling lock	Auto reset
Er05	Discharge temperature probe error	CompCR Lock	Auto reset
Er06	CRII compressor thermal switch	CompCR Lock	Auto reset
Er07	CRII compressor high temperature	CompCR Lock	Auto reset
Er08	Maximum pressure switch alarm	Fan 100%	Auto reset
Er09	Minimum pressure switch alarm	Com1-4 , cr , Fan stop	Auto reset

Alarms table		**Action**	
Er10	Compressor 1 thermal switch alarm	Com1 lock	Auto reset
Er11	Compressor 2 thermal switch alarm	Com2 lock	Auto reset
Er12	Compressor 3 thermal switch alarm	Com3 lock	Auto reset
Er13	Compressor 4 thermal switch alarm	Com4 lock	Auto reset
Er14	Fans thermal switch alarm	Com1-4 , cr , Fan stop	Auto reset
Er15	Low suction pressure alarm	Display only	Auto reset
Er16	High condensation pressure alarm	Display only	Auto reset
Er17	Suction temperature probe error	Display only	Auto reset
Er18	Low overheating alarm	Display only	Auto reset
Er19	High overheating alarm	Display only	Auto reset

Alarm log

The controller stores the last 20 alarms i memory to view the log enter the Set menu, then folder Hyst.