

AIR-CONDITIONERS - CHILLERS				Plate evaporator	Tube bundle evaporator	Finned coil evaporator
PID	SHset	Superheat set point	°C	6	6	6
	K prop	PID: proportional gain	-	3	5	10
	Ti	PID: integration time	sec	40	60	100
	Td	PID: derivative time	sec	1	1	2
PROTECTOR S	LowSH	LowSH prot.: threshold	°C	2	2	2
	LowSH Ti	LowSH prot.: integration time	sec	2.5	2.5	10
	LOP ³	LOP prot.: threshold	°C	-5	-5	-5
	LOP Ti	LOP prot.: integration time	sec	4	4	10
	MOP	MOP prot.: threshold	°C	12	12	12
	MOP Ti	MOP prot.: integration time	sec	10	10	20
	MOP HiTsur	MOP prot.: maximum superheated gas temperature limit	°C	30	30	30
	MOP Delav	MOP prot.: activation delay at start	sec	30	30	30
	HiTcond	HiTcond prot.: threshold	°C	60	60	60
	HiTcond Ti ⁴	HiTcond prot.: integration time	sec	10	10	20

Tab. 8.c – Recommended parameters for AIR-CONDITIONERS – CHILLERS

AIR-CONDITIONERS - CHILLERS				Variable cooling capacity (steps, inverter)	Perturbed system
PID	SHset	Superheat set point	°C	6	6
	K prop	PID: proportional gain	-	15	20
	Ti	PID: integration time	sec	150	100
	Td	PID: derivative time	sec	5	15
PROTECTOR S	LowSH	LowSH prot.: threshold	°C	2	2
	LowSH Ti	LowSH prot.: integration time	sec	10	15
	LOP ³	LOP prot.: threshold	°C	-5	-5
	LOP Ti	LOP prot.: integration time	sec	10	15
	MOP	MOP prot.: threshold	°C	12	12
	MOP Ti	MOP prot.: integration time	sec	20	30
	MOP HiTsur	MOP prot.: maximum superheated gas temperature limit	°C	30	30
	MOP Delav	MOP prot.: activation delay at start	sec	30	30
	HiTcond	HiTcond prot.: threshold	°C	60	60
	HiTcond Ti ³	HiTcond prot.: integration time	sec	20	30

Tab. 8.d – Recommended parameters for AIR-CONDITIONERS - CHILLERS (continued)

³ The LOP threshold is set between the limit of the low pressure switch and the design evaporation temperature. If using a water-glycol mix, the threshold must be adapted to values that are at least 5 °C lower than the evaporation temperature.

⁴ The HiTcond protection can only be enabled if the condenser probe is connected to the driver and its value is sent via LAN. Otherwise the integration time must be set to 0.