

Season definition block: Winter/Summer.

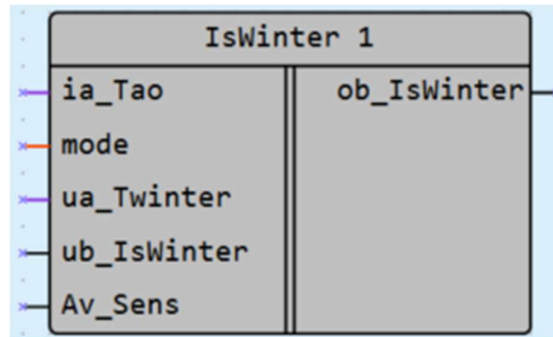


Figure 1 – Symbol

Inputs	Data type	Description	Range
ia_Tao	Float	Outdoor air temperature (Tnar)	
mode	Int	Season determination mode	0 – by Tnar 1 – by button
ua_Twinter	Float	Season change temperature (Tust)	
ub_IsWinter	Bool	Season setting button	0 – Summer 1 – Winter
Av_Sens	Bool	Tnar sensor malfunction	0 – Normal 1 – Fault
Outputs	Data type	Description	Range
ob_IsWinter	Bool	Current season	0 – Summer 1 – Winter

Explanation of how macro works

The macro is designed to determine the current season.

If the operating mode is selected – “By Tnar” (mode=0), then the transition to the “Summer” season (ob_IsWinter=0) occurs when $T_{nar} < T_{ust}$ ($ia_Tao < ua_Twinter$);

the transition to the “Winter” season (ob_IsWinter=1) occurs when $T_{nar} > T_{ust}+3$ ($ia_Tao > ua_Twinter+3$).

If the outdoor air temperature sensor is faulty (Av_Sens=1), then the season is “Winter.”

If the mode is selected – “By button” (mode=1), then the current season equals the button position (ub_IsWinter).

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