

# Goodman electronic controls

*Fast and easy direct OEM replacement  
for air handler, integrated furnace  
and outdoor controls*



## Direct OEM replacement control

Fast drop-in OEM mounting and wiring.



## Source with other HVAC control

Save time by finding these boards at your local HVAC distributor.



## System diagnostics for faster servicing

7 segment or flashing diagnostic LED aids in quicker and accurate system troubleshooting.



## Complete cross reference

Extensive and up-to-date cross reference by OEM model number.



## Goodman comfortnet communicating systems

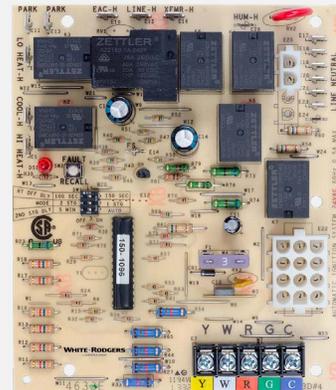
Controls to support legacy 24VAC or communicating system wiring.



50T35-743

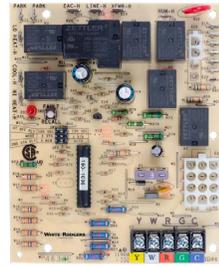


50M56-707



50M56-743

## Goodman integrated furnace controls



Models	50T35-743	50A55-743	50M56-743	50M56-707
Control Type	IFC direct OEM Replacement Single stage systems PSC blower motor	IFC direct OEM Replacement Single stage systems PSC blower motor	IFC direct OEM Replacement Single stage systems PSC blower motor	IFC direct OEM Replacement Single stage systems PSC blower motor
Blower speeds	Heat, cool	Heat, cool	Lo heat, hi heat, cool	Heat, cool
Key differentiator	9-Pin main connector	7s ignitor warm-up	2-Stage gas valve	17s ignitor warm-up
Versatility	Replaces 9 parts	Replaces 10 parts	Replaces 9 parts	Replaces 14 parts
Harness Included	Yes	—	—	—
Diagnostics	System Diagnostic LED	System Diagnostic LED	System diagnostic LED w/ fault recall	System diagnostic LED w/ fault recall, Flame test pad
Mounting	Drop-in Replacement	Drop-in Replacement	Drop-in Replacement	Drop-in Replacement
Fuse	On board	On board	On board	On board
Ignitor Voltage	120v	120v	120v	120v
Dedicated Humidification (Optional)	120v or 24v	120v	120v	120v
Electronic Air cleaner (Optional)	120v	120v	120v	120v
Heat-on-delay	30s	30s	30s	30s
Heat-off-delay	90/120/150s	90/120/150/180s	100/150s	100/150s
Cool-on-delay	5s	5s	6s	6s
Cool-off-delay	60s	45s	45s	45s

## Goodman comfortnet communicating systems



Models	50C51-707	48C21-707	Models	49S25-707
Control Type	IFC Direct oem Replacement Two-stage, Variable speed Blower motor - Communicating Or legacy 24v systems	Air handler Direct oem Replacement two- Stage electric heat, Variable speed Blower motor - Communicating Or legacy 24v systems	Control Type	Ac or heat pump Direct oem Replacement Two-stage compressor, Psc or ecm outdoor fan Motor - communicating Or legacy 24v systems
Versatility	Replaces 13 parts	Replaces 13 parts	Versatility	Replaces 11 parts
Harness Included	—	—	Harness Included	—
Diagnostics	7 Segment system Diagnostic LED	7 Segment system Diagnostic LED	Diagnostics	7 Segment system Diagnostic led
Mounting	Drop-in Replacement	Drop-in Replacement	Mounting	Drop-in Replacement
Fuse	On board	On board	Fuse	On board
Ignitor Voltage	120v	—	Compressor Short cycle delay	3min
Dedicated Humidification (Optional)	120v	—	Compressor Minimum Run time	30s
Electronic Air cleaner (Optional)	120v	—	Field test time	5s
Heat-on-delay	30s	0s (electric)	Rv shift delay	0/5/15/30s (comm) 30s (legacy)
Heat-off-delay	90/120/150s	90s (electric)	Maximum defrost Cycle time	10min
Cool-on-delay	5s	5s (legacy)	Compressor run Time until defrost	30/60/90/120 Min
Cool-off-delay	45s (legacy)	60s (legacy)	Outdoor fan On/off delay	1s

## Cross reference information

Control number	50M56-707	50A55-743	50T35-743	50M56-743	50C51-707	48C21-707	49S25-707	Control number	50M56-707	50A55-743	50T35-743	50M56-743	50C51-707	48C21-707	49S25-707	Control number	50M56-707	50A55-743	50T35-743	50M56-743	50C51-707	48C21-707	49S25-707		
ICM								PCBBF136								Trane									
ICM280			X					PCBBF135S	X							CNT04664			X						
ICM286		X						PCBBF135	X							White-Rodgers									
ICM2810	X							PCBBF134S	X							48C21-289							X		
Goodman								PCBBF134								48C21-707									
0130F00005		X						PCBBF162				X				48C21-290-01							X		
0130F000055		X						PCBBF162S				X				48C21-290-02							X		
0130F00006				X				PCBGR102							X	48C21-290-04							X		
0130F000065				X				PCBGR102S							X	49C25-290-01								X	
B18099-06			X					PCBHR103							X	49J22-289								X	
B18099-08			X					PCBHR103S							X	49J22-289-02								X	
B18099-13			X					PCBHR104							X	49K25-289-01								X	
B1809913S			X					PCBHR104S							X	49S25-707								X	
PCB00109				X				PCBJA101						X		50A55-289		X							
PCBBF110		X						PCBJA101S						X		50A55-743		X							
PCBBF110S		X						PCBJA102						X		50C51-289-01							X		
PCBBF112		X						PCBJA102S						X		50C51-289-02							X		
PCBBF122				X				PCBJA103						X		50C51-289-90							X		
PCBBF123		X						PCBJA103S						X		50C51-290							X		
PCBBF132S				X				PCBJA104						X		50C51-290-01							X		
PCBBF140S	X							PCBJA104S						X		50C51-290-02							X		
PCBBF140	X							PCBKF101S					X			50C51-290-03							X		
PCBBF138S	X							PCBKF102					X			50C51-707							X		
PCBBF138	X							PCBKF102S					X			50M56-289				X					
PCBBF16S	X							PCBKF103					X			50M56-290				X					
								PCBKF105S					X			50M56-707	X								
																50M56-743							X		
																50T55-289		X							
																50M56-291		X							
																50M56-281		X							
																50T35-730							X		
																50T35-731-1							X		
																50T35-743							X		

### The White-Rodgers mobile app:

- Latest cross reference
- Installation instructions
- Spec sheets
- Product selection

