

MANUAL AIR CONDITIONING

HVAC SYSTEM (HEATER, VENTILATOR AND A/C)

3. Manual Air Conditioning

A: GENERAL

1. SPECIFICATIONS

Item	Specifications		Remarks	
Air conditioning	"Full-air-mix" type			
Cooling performance	Cooling capacity (W)	5100		
	Air flow rate (m ³ /h)	450		
Refrigerant quantity	HFC-134a (g)	500±50		
Compressor	Type	Rotary type with vanes	Calsonic CR14	
	Capacity (cm ³ /rev)	144		
	Maximum permissible speed (rpm)	7000		
	Lubricant (amount contained in compressor in g)	DH-PR (180)		
Magnetic clutch	Type	Dry, single disc		
	Power consumption (W)	47		
	Pulley ratio	1:1.064 (crankshaft pulley diameter: 133 mm; compressor pulley diameter: 125 mm)		
	Belt	Polyurethane V-belt with four ribs		
Condenser	Type	Multi-flow type (with built-in liquid tank for subcooling)		
	Fan	Type		Electric-motor-driven axial flow fan
		Fan diameter		320 mm (7+5 blades)
		Power consumption (W)		120 × 2 (turbo models), 70 × 2 (non-turbo models)
Evaporator	Type	Laminated		
	Expansion valve	External pressure equalizing type		
	Temperature control	Thermo AMP (amplifier)		
Other controls	Fast idle control system	Engine control module (ECM)		
	High and low pressure limit control	Low-pressure switch: Turns off compressor at a pressure lower than 0.278 MPa High pressure switch: Turns off compressor at a pressure higher than 2.8 MPa		
	High-speed limit control	Performed by ECM		
	Radiator and condenser fan control	Performed by ECM		

2. CONTROL PANEL

<Ref. to AC-5 — Heater System, CONTROL PANEL.>

3. THERMO AMP (AMPLIFIER)

The thermo AMP detects the temperature at the evaporator outlet to turn off the magnetic clutch circuit when the evaporator temperature drops to a certain level in order to prevent frost from forming on the evaporator.