

Cooling

Model(s):	Outdoor Unit	U-140PZH4E5	
	Indoor Unit	P-VTVF140MC5-PE / P-VTVF140NC5-PE / P-VTVF140PC5-PE	
Outdoor side heat exchanger of air conditioner:	Air		
Indoor side heat exchanger of air conditioner:	Air		
If applicable: driver of the compressor :	electric motor		
Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	15,11	kW
T <sub>i</sub> =+ 35°C	P <sub>dc</sub>	14,01	kW
T <sub>i</sub> =+ 30°C	P <sub>dc</sub>	9,29	kW
T <sub>i</sub> =+ 25°C	P <sub>dc</sub>	6,89	kW
T <sub>i</sub> =+ 20°C	P <sub>dc</sub>	3,26	kW
Degradation coefficient for air conditioners(*)	C <sub>dc</sub>	0,25	Default 0,25 if not measured
Power consumption in modes other than "active mode"			
Off mode	P <sub>off</sub>	0,00	kW
Thermostat-off mode	P <sub>to</sub>	0,029	kW
Other items			
Capacity control	fixed/Staged/variable	variable	
Sound power level, indoors	L <sub>wa</sub>	58	dB
Sound power level, outdoors	L <sub>wa</sub>	74	dB
Emissions of nitrogen oxides	NO <sub>x</sub> (**)	-	mg/kWh fuel input GCV
GWP of the refrigerant		675	kg CO <sub>2</sub> eq (100 years)

Item	Symbol	Value	Unit
Seasonal space cooling energy efficiency	η <sub>s,c</sub>	227	%
T <sub>i</sub> =+ 35°C	EER <sub>d</sub>	3,46	%
T <sub>i</sub> =+ 30°C	EER <sub>d</sub>	4,62	%
T <sub>i</sub> =+ 25°C	EER <sub>d</sub>	6,5	%
T <sub>i</sub> =+ 20°C	EER <sub>d</sub>	11,44	%
Crankcase heater mode	P <sub>ck</sub>	0,00	kW
Standby mode	P <sub>sb</sub>	0,029	kW
For air to air air conditioner: air flow rate , outdoor measured	-	5340	m³/h

Heating

Model(s):	Outdoor Unit	U-140PZH4E5	
	Indoor Unit	P-VTVF140MC5-PE / P-VTVF140NC5-PE / P-VTVF140PC5-PE	
Outdoor side heat exchanger of air conditioner:	Air		
Indoor side heat exchanger of air conditioner:	Air		
Indication if the heater is equipped with a supplementary heater:	No		
If applicable: driver of the compressor :	Electric motor		
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.			
Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	14,13	
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	9,43	kW
T <sub>j</sub> =+ 2°C	P <sub>dh</sub>	6,31	kW
T <sub>j</sub> =+ 7°C	P <sub>dh</sub>	4,16	kW
T <sub>j</sub> =+ 12°C	P <sub>dh</sub>	4,32	kW
T <sub>biv</sub> = bivalent temperature	P <sub>dh</sub>	10,96	kW
T <sub>OL</sub> = operation limit	P <sub>dh</sub>	7,66	kW
For air-to-water heat pumps: T <sub>j</sub> =- 15 °C (if T <sub>OL</sub> < - 20	P <sub>dh</sub>	-	kW
Bivalent temperature	T <sub>biv</sub>	-10	°C
Degradation coefficient for air conditioners(**)	C <sub>dh</sub>	0,25	-
Power consumption in modes other than "active mode"			
Off mode	P <sub>OFF</sub>	0,000	kW
Thermostat-off mode	P <sub>TO</sub>	0,029	kW
Crankcase heater mode	P <sub>CK</sub>	0,000	kW
Other items			
Capacity Control	fixed/staged/ variable	Variable	
Sound power level, indoors/outdoors mesasured	L <sub>WA</sub>	58	dB
Sound power level,outdoors mesasured	L <sub>WA</sub>	74	dB
Emissions of nitrogen oxides	-	-	mg/kWh fuel input GCV
GWP of the refrigerant		675	kg CO <sub>2</sub> eq (100 years)

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s,h</sub>	155	%
T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2,8	%
T <sub>j</sub> =+ 2°C	COP <sub>d</sub>	3,7	%
T <sub>j</sub> =+ 7°C	COP <sub>d</sub>	5,5	%
T <sub>j</sub> =+ 12°C	COP <sub>d</sub>	6,2	%
T <sub>biv</sub> = bivalent temperature	COP <sub>d</sub>	2,3	%
T <sub>OL</sub> = operation limit	COP <sub>d</sub>	1,77	%
For air-to-water heat pumps: T <sub>j</sub> =	COP <sub>d</sub>	-	%
For water-to-air heat pumps:			
Operation limit temperature	T <sub>OL</sub>	-20	°C
Supplementary heater			
Back-up heating capacity (*)	elbu	0,0	kW
Type of energy input			
Standby mode	P <sub>SB</sub>	0,029	kW
For air-to-air air conditioner: air flow rate, outdoor measured		4980	m³/h
pumps: Rated brine or water flow rate, outdoor side heat		-	m³/h

P-VTVF250
EN13285 test report

Cooling

Model(s):	Outdoor Unit	U-250PZH4E8	
	Indoor Unit	P-VTVF250MCS-PE / P-VTVF250NC5-PE / P-VTVF250PCS-PE	
Outdoor side heat exchanger of air conditioner:	Air		
Indoor side heat exchanger of air conditioner:	Air		
If applicable: driver of the compressor :	electric motor		
Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	24,18	kW
T <sub>i</sub> =+ 35°C	P <sub>dc</sub>	24,18	kW
T <sub>i</sub> =+ 30°C	P <sub>dc</sub>	18,18	kW
T <sub>i</sub> =+ 25°C	P <sub>dc</sub>	10,78	kW
T <sub>i</sub> =+ 20°C	P <sub>dc</sub>	4,38	kW
Degradation coefficient for air conditioners(*)	C <sub>dc</sub>	0,25	-
Power consumption in modes other than "active mode"			
Off mode	P <sub>off</sub>	0,000	kW
Thermostat-off mode	P <sub>to</sub>	0,029	kW
Other items			
Capacity control	fixed/Staged/variable	variable	
Sound power level, indoors	L <sub>WA</sub>	68	dB
Sound power level, outdoors	L <sub>WA</sub>	76	dB
Emissions of nitrogen oxides	NO <sub>x</sub> (**)	-	mg/kWh fuel input GCV
GWP of the refrigerant		675	kg CO <sub>2</sub> eq (100 years)

Item	Symbol	Value	Unit
Seasonal space cooling energy efficiency	η <sub>s,c</sub>	250	%
T <sub>i</sub> =+ 35°C	EER <sub>d</sub>	3,8	%
T <sub>i</sub> =+ 30°C	EER <sub>d</sub>	5,33	%
T <sub>i</sub> =+ 25°C	EER <sub>d</sub>	8,16	%
T <sub>i</sub> =+ 20°C	EER <sub>d</sub>	7,26	%
Crankcase heater mode	P <sub>ck</sub>	0,0	kW
Standby mode	P <sub>sb</sub>	0,029	kW
For air to air air conditioner: air flow rate , outdoor measured		6960	m³/h

Heating

Model(s):	Outdoor Unit	U-250PZH4E8	
	Indoor Unit	P-VTVF250MCS-PE / P-VTVF250NC5-PE / P-VTVF250PCS-PE	
Outdoor side heat exchanger of air conditioner:	Air		
Indoor side heat exchanger of air conditioner:	Air		
Indication if the heater is equipped with a supplementary heater:	No		
If applicable: driver of the compressor :	Electric motor		
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.			
Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	26,69	kW
T <sub>i</sub> = - 7 °C	P <sub>dh</sub>	16,38	kW
T <sub>i</sub> =+ 2°C	P <sub>dh</sub>	9,9	kW
T <sub>i</sub> =+ 7°C	P <sub>dh</sub>	6,31	kW
T <sub>i</sub> =+ 12°C	P <sub>dh</sub>	7,36	kW
T <sub>biv</sub> = bivalent temperature	P <sub>dh</sub>	18,52	kW
T <sub>oL</sub> = operation limit	P <sub>dh</sub>	15,29	kW
For air-to-water heat pumps: T <sub>i</sub> = - 15 °C (if T <sub>oL</sub> < - 20 °C)	P <sub>dh</sub>	-	kW
Bivalent temperature	T <sub>biv</sub>	-10	°C
Degradation coefficient for air conditioners(**)	C <sub>dh</sub>	0,25	-
Power consumption in modes other than "active mode"			
Off mode	P <sub>off</sub>	0,000	kW
Thermostat-off mode	P <sub>to</sub>	0,029	kW
Crankcase heater mode	P <sub>ck</sub>	0,000	kW
Other items			
Capacity Control	fixed/staged/variable	variable	
Sound power level, indoors/outdoors measured	L <sub>WA</sub>	68	dB
Sound power level,outdoors measured	L <sub>WA</sub>	82	dB
Emissions of nitrogen oxides	-	-	mg/kWh fuel input GCV
GWP of the refrigerant		675	kg CO <sub>2</sub> eq (100 years)

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s,h</sub>	155	%
T <sub>i</sub> = - 7 °C	COP <sub>d</sub>	2,75	%
T <sub>i</sub> =+ 2°C	COP <sub>d</sub>	3,7	%
T <sub>i</sub> =+ 7°C	COP <sub>d</sub>	5,83	%
T <sub>i</sub> =+ 12°C	COP <sub>d</sub>	5,99	%
T <sub>biv</sub> = bivalent temperature	COP <sub>d</sub>	2,42	%
T <sub>oL</sub> = operation limit	COP <sub>d</sub>	1,94	%
For air-to-water heat pumps: T <sub>i</sub> = - 15 °C (if T <sub>oL</sub> < - 20 °C)	COP <sub>d</sub>	-	%
For water-to-air heat pumps: Operation limit (T <sub>oL</sub> )	T <sub>oL</sub>	-20	°C
Supplementary heater			
Back-up heating capacity (*)	elbu	0,0	kW
Type of energy input			
Standby mode	P <sub>sb</sub>	0,029	kW
For air-to-air air conditioner: air flow rate, outdoor measured		8880	m³/h
brine or water flow rate, outdoor side heat exchanger		-	m³/h