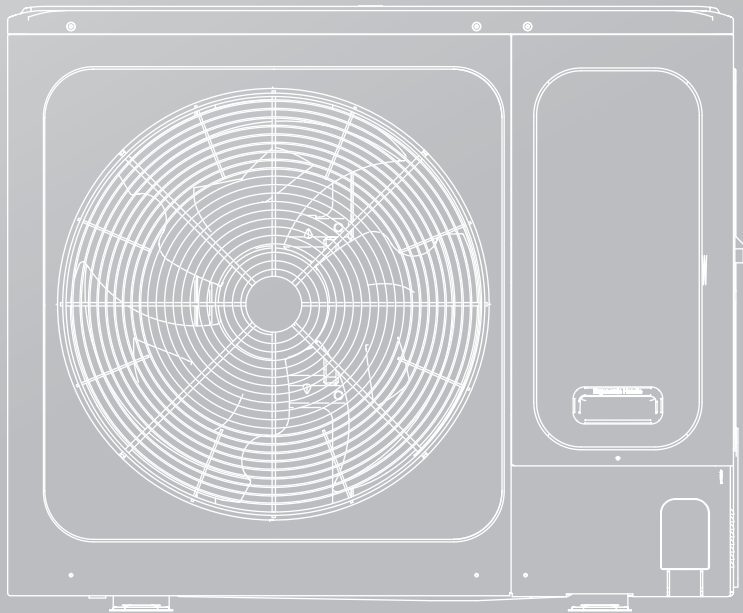


# TECHNICAL DATA MANUAL

## MINI VRF OUTDOOR UNIT

MDV-V80WDN1(D)  
MDV-V100WDN1(D)  
MDV-V120WDN1(D)  
MDV-V140WDN1(D)  
MDV-V160WDN1(D)  
MDV-V180WDN1(D)



### IMPORTANT NOTE:



Thank you very much for purchasing our product,  
Before using your unit , please read this manual carefully and keep it for future reference.

MDV-V80WDN1(D) T2

Name or trademark		Midea
Indoor model		2×MIH15T2N18(Q)+2×MIH22T2N18(Q)
Outdoor model		MDV-V80WDN1(D)
Harmonized standards		(EU)206/2012+(EU)2016/2282; (EU)No 626/201+(EU)2017/254; EN 14825:2016; EN 14511-3:2013; EN 12102-1:2017
Specifics precautions		None
Testing conditions		According to harmonized standards
Sound power level at standard rating conditions (indoor/outdoor)	[dB]	62/67
Refrigerant type		R410A
GWP	[kg CO <sub>2</sub> , equivalents]	2088
SEER		5.10
Energy efficiency class in cooling		A
Annual electricity consumption in cooling QCE	[kWh/a]	494.0
Design load in cooling mode (P <sub>designc</sub> )	[kW]	7.20
SCOP (heating average season)		3.80
Energy efficiency class in heating (average season)		A
Annual electricity consumption in heating QHE (average season)	[kWh/a]	1989.0
Design load in heating mode (P <sub>designh</sub> )	[kW]	5.40
Declared capacity at reference design condition (heating average season)	[kW]	7.20
Back up heating capacity at referance design condition (heating average season)	[kW]	0
<p>Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a Refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a Refrigerant fluid with a GWP equal to [2088]. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be [2088] times higher than 1kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.</p>		

MDV-V80WDN1(D) Q4

Name or trademark		Midea
Indoor model		MIH28Q4N18+MIH45Q4N18(Q)
Outdoor model		MDV-V80WDN1(D)
Harmonized standards		(EU)206/2012+(EU)2016/2282; (EU)No 626/201+(EU)2017/254; EN 14825:2016; EN 14511-3:2013; EN 12102-1:2017
Specifics precautions		None
Testing conditions		According to harmonized standards
Sound power level at standard rating conditions (indoor/outdoor)	[dB]	60/67
Refrigerant type		R410A
GWP	[kg CO <sub>2</sub> , equivalents]	2088
SEER		5.10
Energy efficiency class in cooling		A
Annual electricity consumption in cooling QCE	[kWh/a]	494.0
Design load in cooling mode (P <sub>designc</sub> )	[kW]	7.20
SCOP (heating average season)		3.80
Energy efficiency class in heating (average season)		A
Annual electricity consumption in heating QHE (average season)	[kWh/a]	1989.0
Design load in heating mode (P <sub>designh</sub> )	[kW]	5.40
Declared capacity at reference design condition (heating average season)	[kW]	7.20
Back up heating capacity at referance design condition (heating average season)	[kW]	0
<p>Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a Refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a Refrigerant fluid with a GWP equal to [2088]. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be [2088] times higher than 1kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.</p>		

MDV-V100WDN1(D) T2

Name or trademark		Midea
Indoor model		3×MIH22T2N18(Q)+MIH28T2N18(Q);
Outdoor model		MDV-V100WDN1(D)
Harmonized standards		(EU)206/2012+(EU)2016/2282; (EU)No 626/201+(EU)2017/254; EN 14825:2016; EN 14511-3:2013; EN 12102-1:2017
Specifics precautions		None
Testing conditions		According to harmonized standards
Sound power level at standard rating conditions (indoor/outdoor)	[dB]	62/70
Refrigerant type		R410A
GWP	[kg CO <sub>2</sub> , equivalents]	2088
SEER		5.10
Energy efficiency class in cooling		A
Annual electricity consumption in cooling QCE	[kWh/a]	618.0
Design load in cooling mode (P <sub>designc</sub> )	[kW]	9.00
SCOP (heating average season)		3.80
Energy efficiency class in heating (average season)		A
Annual electricity consumption in heating QHE (average season)	[kWh/a]	1989.0
Design load in heating mode (P <sub>designh</sub> )	[kW]	5.40
Declared capacity at reference design condition (heating average season)	[kW]	9.00
Back up heating capacity at referance design condition (heating average season)	[kW]	0
<p>Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a Refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a Refrigerant fluid with a GWP equal to [2088]. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be [2088] times higher than 1kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.</p>		

MDV-V100WDN1(D) Q4

Name or trademark		Midea
Indoor model		2×MIH45Q4N18(Q)
Outdoor model		MDV-V100WDN1(D)
Harmonized standards		(EU)206/2012+(EU)2016/2282; (EU)No 626/201+(EU)2017/254; EN 14825:2016; EN 14511-3:2013; EN 12102-1:2017
Specifics precautions		None
Testing conditions		According to harmonized standards
Sound power level at standard rating conditions (indoor/outdoor)	[dB]	60/70
Refrigerant type		R410A
GWP	[kg CO <sub>2</sub> , equivalents]	2088
SEER		5.10
Energy efficiency class in cooling		A
Annual electricity consumption in cooling QCE	[kWh/a]	618.0
Design load in cooling mode (P <sub>designc</sub> )	[kW]	9.00
SCOP (heating average season)		3.80
Energy efficiency class in heating (average season)		A
Annual electricity consumption in heating QHE (average season)	[kWh/a]	1989.0
Design load in heating mode (P <sub>designh</sub> )	[kW]	5.40
Declared capacity at reference design condition (heating average season)	[kW]	9.00
Back up heating capacity at referance design condition (heating average season)	[kW]	0
<p>Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a Refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a Refrigerant fluid with a GWP equal to [2088]. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be [2088] times higher than 1kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.</p>		

MDV-V120WDN1(D) T2

Cooling mode:

Information requirements for air-to-air conditioners							
Model(s): MDV-V120WDN1(D) Test matching indoor units form, ducted: 2×MIH22T2N18(Q)+MIH36T2N18(Q)+MIH45T2N18(Q)							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	12.30	kW	Seasonal space cooling energy efficiency	η <sub>s,c</sub>	263.0	%
Declared cooling capacity for part load at given outdoor temperatures T <sub>j</sub> and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	12.30	kW	T <sub>j</sub> =+35°C	EER <sub>d</sub>	2.71	--
T <sub>j</sub> =+30°C	P <sub>dc</sub>	9.06	kW	T <sub>j</sub> =+30°C	EER <sub>d</sub>	4.71	--
T <sub>j</sub> =+25°C	P <sub>dc</sub>	5.83	kW	T <sub>j</sub> =+25°C	EER <sub>d</sub>	8.56	--
T <sub>j</sub> =+20°C	P <sub>dc</sub>	3.82	kW	T <sub>j</sub> =+20°C	EER <sub>d</sub>	12.64	--
Degradation co-efficient for air conditioners(*)							
	C <sub>dc</sub>	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P <sub>OFF</sub>	0.023	kW	Crankcase heater mode	P <sub>CK</sub>	0.002	kW
Thermostat-off mode	P <sub>TO</sub>	0.002	kW	Standby mode	P <sub>SB</sub>	0.023	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	5000	m <sup>3</sup> /h
Sound power level, outdoor	L <sub>WA</sub>	74	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)If C <sub>dc</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

## Heating mode:

Information requirements for heat pumps								
Model(s): MDV-V120WDN1(D)								
Test matching indoor units form, ducted: 2×MIH22T2N18(Q)+MIH36T2N18(Q)+MIH45T2N18(Q)								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of 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		Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	14.0	kW		Seasonal space heating energy efficiency	η <sub>s,h</sub>	167.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T <sub>j</sub>					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =-7°C	P <sub>dh</sub>	6.19	kW		T <sub>j</sub> =-7°C	COP <sub>d</sub>	2.40	--
T <sub>j</sub> =+2°C	P <sub>dh</sub>	3.77	kW		T <sub>j</sub> =+2°C	COP <sub>d</sub>	4.31	--
T <sub>j</sub> =+7°C	P <sub>dh</sub>	2.49	kW		T <sub>j</sub> =+7°C	COP <sub>d</sub>	5.73	--
T <sub>j</sub> =+12°C	P <sub>dh</sub>	2.77	kW		T <sub>j</sub> =+12°C	COP <sub>d</sub>	7.09	--
T <sub>biv</sub> =bivalent temperature	P <sub>dh</sub>	7.00	kW		T <sub>biv</sub> =bivalent temperature	COP <sub>d</sub>	2.12	--
T <sub>oL</sub> =operation temperature	P <sub>dh</sub>	7.00	kW		T <sub>oL</sub> =operation temperature	COP <sub>d</sub>	2.12	--
Bivalent temperature	T <sub>biv</sub>	-10	°C					
Degradation co-efficient for heat pumps(**)								
	C <sub>dh</sub>	0.25	--		Supplementary heater			
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P <sub>OFF</sub>	0.023	kW		Back-up heating capacity(*)	e <sub>lbu</sub>	0	kW
Thermostat-off mode	P <sub>TO</sub>	0.028	kW		Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.002	kW		Standby mode	P <sub>SB</sub>	0.023	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	5000	m <sup>3</sup> /h
Sound power level,outdoor	LWA	74	dB					
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)					
Contact details								
(*)								
(**)If C <sub>dh</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

MDV-V120WDN1(D) Q4

Cooling mode:

Information requirements for air-to-air conditioners							
Model(s): MDV-V120WDN1(D)							
Test matching indoor units form 2, non-duct: 3×MIH28Q4N18+MIH45Q4N18(Q)							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	12.30	kW	Seasonal space cooling energy efficiency	η <sub>s,c</sub>	261.0	%
Declared cooling capacity for part load at given outdoor temperatures T <sub>j</sub> and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	12.30	kW	T <sub>j</sub> =+35°C	EER <sub>d</sub>	2.71	--
T <sub>j</sub> =+30°C	P <sub>dc</sub>	9.06	kW	T <sub>j</sub> =+30°C	EER <sub>d</sub>	4.71	--
T <sub>j</sub> =+25°C	P <sub>dc</sub>	5.83	kW	T <sub>j</sub> =+25°C	EER <sub>d</sub>	8.40	--
T <sub>j</sub> =+20°C	P <sub>dc</sub>	3.93	kW	T <sub>j</sub> =+20°C	EER <sub>d</sub>	12.93	--
Degradation co-efficient for air conditioners(*)							
	C <sub>dc</sub>	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P <sub>OFF</sub>	0.023	kW	Crankcase heater mode	P <sub>CK</sub>	0.002	kW
Thermostat-off mode	P <sub>TO</sub>	0.002	kW	Standby mode	P <sub>SB</sub>	0.023	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	5000	m <sup>3</sup> /h
Sound power level, outdoor	L <sub>WA</sub>	74	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)If C <sub>dc</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

## Heating mode:

Information requirements for heat pumps								
Model(s): MDV-V120WDN1(D)								
Test matching indoor units form 2, non-duct: 3×MIH28Q4N18+MIH45Q4N18(Q)								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of 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		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	14.0	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	169.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures $T_j$					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures $T_j$			
$T_j=-7^\circ\text{C}$	$P_{dh}$	6.11	kW		$T_j=-7^\circ\text{C}$	$COP_d$	2.44	--
$T_j=+2^\circ\text{C}$	$P_{dh}$	3.77	kW		$T_j=+2^\circ\text{C}$	$COP_d$	4.34	--
$T_j=+7^\circ\text{C}$	$P_{dh}$	2.49	kW		$T_j=+7^\circ\text{C}$	$COP_d$	5.96	--
$T_j=+12^\circ\text{C}$	$P_{dh}$	2.76	kW		$T_j=+12^\circ\text{C}$	$COP_d$	7.38	--
$T_{biv}$ =bivalent temperature	$P_{dh}$	7.00	kW		$T_{biv}$ =bivalent temperature	$COP_d$	2.17	--
$T_{OL}$ =operation temperature	$P_{dh}$	7.00	kW		$T_{OL}$ =operation temperature	$COP_d$	2.17	--
Bivalent temperature	$T_{biv}$	-10	°C					
Degradation co-efficient for heat pumps(**)	$C_{dh}$	0.25	--					
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	$P_{OFF}$	0.023	kW		Back-up heating capacity(*)	$e_{lbu}$	0	kW
Thermostat-off mode	$P_{TO}$	0.028	kW		Type of energy input			
Crankcase heater mode	$P_{CK}$	0.002	kW		Standby mode	$P_{SB}$	0.023	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	5000	m <sup>3</sup> /h
Sound power level,outdoor	LWA	74	dB					
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)					
Contact details								
(*)								
(**)If $C_{dh}$ is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

MDV-V140WDN1(D) T2

Cooling mode:

Information requirements for air-to-air conditioners							
Model(s): MDV-V140WDN1(D)							
Test matching indoor units form, ducted: 2×MIH28T2N18(Q)+2×MIH45T2N18(Q)							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	14.00	kW	Seasonal space cooling energy efficiency	η <sub>s,c</sub>	261.0	%
Declared cooling capacity for part load at given outdoor temperatures T <sub>j</sub> and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	14.00	kW	T <sub>j</sub> =+35°C	EER <sub>d</sub>	2.62	--
T <sub>j</sub> =+30°C	P <sub>dc</sub>	10.32	kW	T <sub>j</sub> =+30°C	EER <sub>d</sub>	4.58	--
T <sub>j</sub> =+25°C	P <sub>dc</sub>	6.63	kW	T <sub>j</sub> =+25°C	EER <sub>d</sub>	8.69	--
T <sub>j</sub> =+20°C	P <sub>dc</sub>	5.47	kW	T <sub>j</sub> =+20°C	EER <sub>d</sub>	12.55	--
Degradation co-efficient for air conditioners(*)							
	C <sub>dc</sub>	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P <sub>OFF</sub>	0.023	kW	Crankcase heater mode	P <sub>CK</sub>	0.002	kW
Thermostat-off mode	P <sub>TO</sub>	0.002	kW	Standby mode	P <sub>SB</sub>	0.023	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	5100	m <sup>3</sup> /h
Sound power level, outdoor	L <sub>WA</sub>	74	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)If C <sub>dc</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

## Heating mode:

Information requirements for heat pumps								
Model(s): MDV-V140WDN1(D) Test matching indoor units form, ducted: 2×MIH28T2N18(Q)+2×MIH45T2N18(Q)								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of 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		Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	16.0	kW		Seasonal space heating energy efficiency	η <sub>s,h</sub>	169.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T <sub>j</sub>				Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>				
T <sub>j</sub> =-7°C	P <sub>dh</sub>	8.14	kW		T <sub>j</sub> =-7°C	COP <sub>d</sub>	2.44	--
T <sub>j</sub> =+2°C	P <sub>dh</sub>	4.95	kW		T <sub>j</sub> =+2°C	COP <sub>d</sub>	4.36	--
T <sub>j</sub> =+7°C	P <sub>dh</sub>	3.38	kW		T <sub>j</sub> =+7°C	COP <sub>d</sub>	5.77	--
T <sub>j</sub> =+12°C	P <sub>dh</sub>	3.99	kW		T <sub>j</sub> =+12°C	COP <sub>d</sub>	7.14	--
T <sub>biv</sub> =bivalent temperature	P <sub>dh</sub>	9.20	kW		T <sub>biv</sub> =bivalent temperature	COP <sub>d</sub>	2.19	--
T <sub>OL</sub> =operation temperature	P <sub>dh</sub>	9.20	kW		T <sub>OL</sub> =operation temperature	COP <sub>d</sub>	2.19	--
Bivalent temperature	T <sub>biv</sub>	-10	°C					
Degradation co-efficient for heat pumps(**)	C <sub>dh</sub>	0.25	--					
Power consumption in modes other than "active mode"				Supplementary heater				
Off mode	P <sub>OFF</sub>	0.023	kW		Back-up heating capacity(*)	e <sub>lbu</sub>	0	kW
Thermostat-off mode	P <sub>TO</sub>	0.028	kW		Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.002	kW		Standby mode	P <sub>SB</sub>	0.023	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	5100	m <sup>3</sup> /h
Sound power level,outdoor	LWA	74	dB					
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)					
Contact details								
(*)								
(**)If C <sub>dh</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

MDV-V140WDN1(D) Q4

Cooling mode:

Information requirements for air-to-air conditioners							
Model(s): MDV-V140WDN1(D)							
Test matching indoor units form 2, non-duct: 2×MIH28Q4N18+2×MIH45Q4N18(Q)							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	14.00	kW	Seasonal space cooling energy efficiency	η <sub>s,c</sub>	261.0	%
Declared cooling capacity for part load at given outdoor temperatures T <sub>j</sub> and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	14.00	kW	T <sub>j</sub> =+35°C	EER <sub>d</sub>	2.65	--
T <sub>j</sub> =+30°C	P <sub>dc</sub>	10.32	kW	T <sub>j</sub> =+30°C	EER <sub>d</sub>	4.51	--
T <sub>j</sub> =+25°C	P <sub>dc</sub>	6.63	kW	T <sub>j</sub> =+25°C	EER <sub>d</sub>	8.79	--
T <sub>j</sub> =+20°C	P <sub>dc</sub>	5.59	kW	T <sub>j</sub> =+20°C	EER <sub>d</sub>	12.70	--
Degradation co-efficient for air conditioners(*)							
	C <sub>dc</sub>	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P <sub>OFF</sub>	0.023	kW	Crankcase heater mode	P <sub>CK</sub>	0.002	kW
Thermostat-off mode	P <sub>TO</sub>	0.002	kW	Standby mode	P <sub>SB</sub>	0.023	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	5100	m <sup>3</sup> /h
Sound power level, outdoor	L <sub>WA</sub>	74	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)If C <sub>dc</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

## Heating mode:

Information requirements for heat pumps							
Model(s): MDV-V140WDN1(D) Test matching indoor units form 2, non-duct: 2×MIH28Q4N18+2×MIH45Q4N18(Q)							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
If the heater is equipped with a supplementary heater: no							
Driver of 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	Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	16.0	kW	Seasonal space heating energy efficiency	η <sub>s,h</sub>	173.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T <sub>j</sub>				Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =-7°C	P <sub>dh</sub>	8.04	kW	T <sub>j</sub> =-7°C	COP <sub>d</sub>	2.50	--
T <sub>j</sub> =+2°C	P <sub>dh</sub>	4.95	kW	T <sub>j</sub> =+2°C	COP <sub>d</sub>	4.41	--
T <sub>j</sub> =+7°C	P <sub>dh</sub>	3.35	kW	T <sub>j</sub> =+7°C	COP <sub>d</sub>	6.13	--
T <sub>j</sub> =+12°C	P <sub>dh</sub>	3.96	kW	T <sub>j</sub> =+12°C	COP <sub>d</sub>	7.59	--
T <sub>biv</sub> =bivalent temperature	P <sub>dh</sub>	9.20	kW	T <sub>biv</sub> =bivalent temperature	COP <sub>d</sub>	2.26	--
T <sub>oL</sub> =operation temperature	P <sub>dh</sub>	9.20	kW	T <sub>oL</sub> =operation temperature	COP <sub>d</sub>	2.26	--
Bivalent temperature	T <sub>biv</sub>	-10	°C				
Degradation co-efficient for heat pumps(**)	C <sub>dh</sub>	0.25	--				
Power consumption in modes other than "active mode"				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.023	kW	Back-up heating capacity(*)	e <sub>lbu</sub>	0	kW
Thermostat-off mode	P <sub>TO</sub>	0.028	kW	Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.002	kW	Standby mode	P <sub>SB</sub>	0.023	kW
Other items							
Capacity control	variable			For air-to-air heat pump: air flow rate, outdoor measured	--	5100	m <sup>3</sup> /h
Sound power level,outdoor	LWA	74	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)							
(**)If C <sub>dh</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

**Cooling mode:**

Information requirements for air-to-air conditioners							
Model(s): MDV-V160WDN1(D)							
Test matching indoor units form, ducted: 2×MIH36T2N18(Q)+2×MIH45T2N18(Q)							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	15.50	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	261.0	%
Declared cooling capacity for part load at given outdoor temperatures $T_j$ and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures $T_j$			
$T_j=+35^\circ\text{C}$	$P_{dc}$	15.50	kW	$T_j=+35^\circ\text{C}$	$EER_d$	2.55	--
$T_j=+30^\circ\text{C}$	$P_{dc}$	11.27	kW	$T_j=+30^\circ\text{C}$	$EER_d$	4.53	--
$T_j=+25^\circ\text{C}$	$P_{dc}$	7.34	kW	$T_j=+25^\circ\text{C}$	$EER_d$	8.75	--
$T_j=+20^\circ\text{C}$	$P_{dc}$	5.48	kW	$T_j=+20^\circ\text{C}$	$EER_d$	12.64	--
Degradation co-efficient for air conditioners(*)							
	$C_{dc}$	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	$P_{OFF}$	0.023	kW	Crankcase heater mode	$P_{CK}$	0.002	kW
Thermostat-off mode	$P_{TO}$	0.002	kW	Standby mode	$P_{SB}$	0.023	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	5000	m <sup>3</sup> /h
Sound power level, outdoor	$L_{WA}$	74	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)If $C_{dc}$ is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

## Heating mode:

Information requirements for heat pumps								
Model(s): MDV-V160WDN1(D) Test matching indoor units form, ducted: 2×MIH36T2N18(Q)+2×MIH45T2N18(Q)								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of 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		Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	17.5	kW		Seasonal space heating energy efficiency	η <sub>s,h</sub>	171.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T <sub>j</sub>					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =-7°C	P <sub>dh</sub>	8.94	kW		T <sub>j</sub> =-7°C	COP <sub>d</sub>	2.55	--
T <sub>j</sub> =+2°C	P <sub>dh</sub>	5.49	kW		T <sub>j</sub> =+2°C	COP <sub>d</sub>	4.28	--
T <sub>j</sub> =+7°C	P <sub>dh</sub>	3.62	kW		T <sub>j</sub> =+7°C	COP <sub>d</sub>	6.08	--
T <sub>j</sub> =+12°C	P <sub>dh</sub>	4.08	kW		T <sub>j</sub> =+12°C	COP <sub>d</sub>	7.52	--
T <sub>biv</sub> =bivalent temperature	P <sub>dh</sub>	10.20	kW		T <sub>biv</sub> =bivalent temperature	COP <sub>d</sub>	2.30	--
T <sub>OL</sub> =operation temperature	P <sub>dh</sub>	10.20	kW		T <sub>OL</sub> =operation temperature	COP <sub>d</sub>	2.30	--
Bivalent temperature	T <sub>biv</sub>	-10	°C					
Degradation co-efficient for heat pumps(**)	C <sub>dh</sub>	0.25	--					
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P <sub>OFF</sub>	0.023	kW		Back-up heating capacity(*)	e <sub>lbu</sub>	0	kW
Thermostat-off mode	P <sub>TO</sub>	0.028	kW		Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.002	kW		Standby mode	P <sub>SB</sub>	0.023	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	5000	m <sup>3</sup> /h
Sound power level,outdoor	LWA	74	dB					
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)					
Contact details								
(*)								
(**)If C <sub>dh</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

MDV-V160WDN1(D) Q4

Cooling mode:

Information requirements for air-to-air conditioners							
Model(s): MDV-V160WDN1(D)							
Test matching indoor units form 2, non-duct: 2×MIH36Q4N18+2×MIH45Q4N18(Q);							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	15.50	kW	Seasonal space cooling energy efficiency	η <sub>s,c</sub>	257.0	%
Declared cooling capacity for part load at given outdoor temperatures T <sub>j</sub> and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	15.50	kW	T <sub>j</sub> =+35°C	EER <sub>d</sub>	2.57	--
T <sub>j</sub> =+30°C	P <sub>dc</sub>	11.42	kW	T <sub>j</sub> =+30°C	EER <sub>d</sub>	4.46	--
T <sub>j</sub> =+25°C	P <sub>dc</sub>	7.34	kW	T <sub>j</sub> =+25°C	EER <sub>d</sub>	8.63	--
T <sub>j</sub> =+20°C	P <sub>dc</sub>	5.81	kW	T <sub>j</sub> =+20°C	EER <sub>d</sub>	12.47	--
Degradation co-efficient for air conditioners(*)							
	C <sub>dc</sub>	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P <sub>OFF</sub>	0.023	kW	Crankcase heater mode	P <sub>CK</sub>	0.002	kW
Thermostat-off mode	P <sub>TO</sub>	0.002	kW	Standby mode	P <sub>SB</sub>	0.023	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	5000	m <sup>3</sup> /h
Sound power level, outdoor	L <sub>WA</sub>	74	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)If C <sub>dc</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

## Heating mode:

Information requirements for heat pumps								
Model(s): MDV-V160WDN1(D) Test matching indoor units form 2, non-duct: 2×MIH36Q4N18+2×MIH45Q4N18(Q);								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of 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		Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	17.50	kW		Seasonal space heating energy efficiency	η <sub>s,h</sub>	169.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T <sub>j</sub>				Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>				
T <sub>j</sub> =-7°C	P <sub>dh</sub>	8.99	kW		T <sub>j</sub> =-7°C	COP <sub>d</sub>	2.50	--
T <sub>j</sub> =+2°C	P <sub>dh</sub>	5.49	kW		T <sub>j</sub> =+2°C	COP <sub>d</sub>	4.17	--
T <sub>j</sub> =+7°C	P <sub>dh</sub>	3.58	kW		T <sub>j</sub> =+7°C	COP <sub>d</sub>	6.14	--
T <sub>j</sub> =+12°C	P <sub>dh</sub>	4.05	kW		T <sub>j</sub> =+12°C	COP <sub>d</sub>	7.60	--
T <sub>biv</sub> =bivalent temperature	P <sub>dh</sub>	10.20	kW		T <sub>biv</sub> =bivalent temperature	COP <sub>d</sub>	2.29	--
T <sub>oL</sub> =operation temperature	P <sub>dh</sub>	10.20	kW		T <sub>oL</sub> =operation temperature	COP <sub>d</sub>	2.29	--
Bivalent temperature	T <sub>biv</sub>	-10	°C					
Degradation co-efficient for heat pumps(**)	C <sub>dh</sub>	0.25	--					
Power consumption in modes other than "active mode"				Supplementary heater				
Off mode	P <sub>OFF</sub>	0.023	kW		Back-up heating capacity(*)	e <sub>lbu</sub>	0	kW
Thermosat-off mode	P <sub>TO</sub>	0.028	kW		Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.002	kW		Standby mode	P <sub>SB</sub>	0.023	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	5000	m <sup>3</sup> /h
Sound power level,outdoor	LWA	74	dB					
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)					
Contact details								
(*)								
(**)If C <sub>dh</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

MDV-V180WDN1(D) T2

Cooling mode:

Information requirements for air-to-air conditioners							
Model(s): MDV-V180WDN1(D) Test matching indoor units form, ducted: 4×MIH45T2N18(Q)							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	17.50	kW	Seasonal space cooling energy efficiency	η <sub>s,c</sub>	257.0	%
Declared cooling capacity for part load at given outdoor temperatures T <sub>j</sub> and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	17.50	kW	T <sub>j</sub> =+35°C	EER <sub>d</sub>	2.45	--
T <sub>j</sub> =+30°C	P <sub>dc</sub>	12.86	kW	T <sub>j</sub> =+30°C	EER <sub>d</sub>	4.48	--
T <sub>j</sub> =+25°C	P <sub>dc</sub>	8.29	kW	T <sub>j</sub> =+25°C	EER <sub>d</sub>	8.30	--
T <sub>j</sub> =+20°C	P <sub>dc</sub>	5.85	kW	T <sub>j</sub> =+20°C	EER <sub>d</sub>	12.69	--
Degradation co-efficient for air conditioners(*)							
	C <sub>dc</sub>	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P <sub>OFF</sub>	0.023	kW	Crankcase heater mode	P <sub>CK</sub>	0.002	kW
Thermostat-off mode	P <sub>TO</sub>	0.002	kW	Standby mode	P <sub>SB</sub>	0.023	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	5300	m³/h
Sound power level, outdoor	L <sub>WA</sub>	75	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)If C <sub>dc</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

## Heating mode:

Information requirements for heat pumps								
Model(s): MDV-V180WDN1(D) Test matching indoor units form, ducted: 4×MIH45T2N18(Q)								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of 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		Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	19.00	kW		Seasonal space heating energy efficiency	η <sub>s,h</sub>	167.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T <sub>j</sub>					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =-7°C	P <sub>dh</sub>	9.38	kW		T <sub>j</sub> =-7°C	COP <sub>d</sub>	2.55	--
T <sub>j</sub> =+2°C	P <sub>dh</sub>	5.71	kW		T <sub>j</sub> =+2°C	COP <sub>d</sub>	4.13	--
T <sub>j</sub> =+7°C	P <sub>dh</sub>	3.80	kW		T <sub>j</sub> =+7°C	COP <sub>d</sub>	5.88	--
T <sub>j</sub> =+12°C	P <sub>dh</sub>	4.29	kW		T <sub>j</sub> =+12°C	COP <sub>d</sub>	7.28	--
T <sub>biv</sub> =bivalent temperature	P <sub>dh</sub>	10.60	kW		T <sub>biv</sub> =bivalent temperature	COP <sub>d</sub>	2.30	--
T <sub>OL</sub> =operation temperature	P <sub>dh</sub>	10.60	kW		T <sub>OL</sub> =operation temperature	COP <sub>d</sub>	2.30	--
Bivalent temperature	T <sub>biv</sub>	-10	°C					
Degradation co-efficient for heat pumps(**)	C <sub>dh</sub>	0.25	--					
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P <sub>OFF</sub>	0.023	kW		Back-up heating capacity(*)	e <sub>lbu</sub>	0	kW
Thermostat-off mode	P <sub>TO</sub>	0.028	kW		Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.002	kW		Standby mode	P <sub>SB</sub>	0.023	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	5300	m <sup>3</sup> /h
Sound power level,outdoor	L <sub>WA</sub>	75	dB					
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)					
Contact details								
(*)								
(**)If C <sub>dh</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

## Cooling mode:

Information requirements for air-to-air conditioners							
Model(s): MDV-V180WDN1(D)							
Test matching indoor units form 2, non-duct: 4×MIH45Q4N18(Q)							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P <sub>rated,c</sub>	17.50	kW	Seasonal space cooling energy efficiency	η <sub>s,c</sub>	257.0	%
Declared cooling capacity for part load at given outdoor temperatures T <sub>j</sub> and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	17.50	kW	T <sub>j</sub> =+35°C	EER <sub>d</sub>	2.45	--
T <sub>j</sub> =+30°C	P <sub>dc</sub>	12.88	kW	T <sub>j</sub> =+30°C	EER <sub>d</sub>	4.36	--
T <sub>j</sub> =+25°C	P <sub>dc</sub>	8.29	kW	T <sub>j</sub> =+25°C	EER <sub>d</sub>	8.55	--
T <sub>j</sub> =+20°C	P <sub>dc</sub>	6.01	kW	T <sub>j</sub> =+20°C	EER <sub>d</sub>	12.61	--
Degradation co-efficient for air conditioners(*)							
	C <sub>dc</sub>	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P <sub>OFF</sub>	0.023	kW	Crankcase heater mode	P <sub>CK</sub>	0.002	kW
Thermostat-off mode	P <sub>TO</sub>	0.002	kW	Standby mode	P <sub>SB</sub>	0.023	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	5300	m <sup>3</sup> /h
Sound power level, outdoor	L <sub>WA</sub>	75	dB				
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)				
Contact details							
(*)If C <sub>dc</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

## Heating mode:

Information requirements for heat pumps								
Model(s): MDV-V180WDN1(D) Test matching indoor units form 2, non-duct: 4×MIH45Q4N18(Q)								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of 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		Item	Symbol	Value	Unit
Rated heating capacity	P <sub>rated,h</sub>	19.00	kW		Seasonal space heating energy efficiency	η <sub>s,h</sub>	167.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T <sub>j</sub>					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>			
T <sub>j</sub> =-7°C	P <sub>dh</sub>	9.23	kW		T <sub>j</sub> =-7°C	COP <sub>d</sub>	2.55	--
T <sub>j</sub> =+2°C	P <sub>dh</sub>	5.71	kW		T <sub>j</sub> =+2°C	COP <sub>d</sub>	4.14	--
T <sub>j</sub> =+7°C	P <sub>dh</sub>	3.74	kW		T <sub>j</sub> =+7°C	COP <sub>d</sub>	6.03	--
T <sub>j</sub> =+12°C	P <sub>dh</sub>	4.23	kW		T <sub>j</sub> =+12°C	COP <sub>d</sub>	7.47	--
T <sub>biv</sub> =bivalent temperature	P <sub>dh</sub>	10.60	kW		T <sub>biv</sub> =bivalent temperature	COP <sub>d</sub>	2.30	--
T <sub>oL</sub> =operation temperature	P <sub>dh</sub>	10.60	kW		T <sub>oL</sub> =operation temperature	COP <sub>d</sub>	2.30	--
Bivalent temperature	T <sub>biv</sub>	-10	°C					
Degradation co-efficient for heat pumps(**)	C <sub>dh</sub>	0.25	--					
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P <sub>OFF</sub>	0.023	kW		Back-up heating capacity(*)	e <sub>lbu</sub>	0	kW
Thermosat-off mode	P <sub>TO</sub>	0.028	kW		Type of energy input			
Crankcase heater mode	P <sub>CK</sub>	0.002	kW		Standby mode	P <sub>SB</sub>	0.023	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	5300	m <sup>3</sup> /h
Sound power level,outdoor	LWA	75	dB					
GWP of the refrigerant		2088	kg CO <sub>2</sub> eq (100years)					
Contact details								
(*)								
(**)If C <sub>dh</sub> is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

# ErP Information

Fan Types	Axial fan		
Directive (or Standard) for Regulation	ErP Directive 2009/125/EC COMMISSION REGULATION (EU) No 327/2011		
Model Name	ZKSN-170-8-3L	Rev.	
Prepare by			

## Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	28.6%
2	Overall efficiency ( $\eta_e$ ) =	34.0%
3	Pass or not (Criteria: $\eta_e \geq \eta_{\text{target}}$ )	Pass
4	Measurement category (A-D)	A
5	Efficiency category (static or total)	Static
6	Efficiency grade at optimum energy efficiency point	N =45.4
7	VSD is integrated within the fan	YES
8	Year of Manufacture	Ref. to the Unit Nameplate
9	Manufacturer's name and place of manufacture	Ref. to the Unit Nameplate
10.1	Rated motor power input(s) (kW), at optimum energy efficiency	0.156kw
10.2	Rated motor flow rate(s) at optimum energy efficiency	1.290m <sup>3</sup> /s
10.3	Rated motor pressure(s) at optimum energy efficiency	36Pa
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	750r/min
12	Specific ratio	1.001
13	Information relevant for facilitating disassembly, recycling or disposal at end-of-life	all materials can be recycled
14	Information relevant to minimize impact on the environment and ensure optimal life expectancy as regards installation, use and maintenance of the fan	For installation, the clearance of 500 mm shall be kept from inlet
15	Description of additional items used when determining the fan energy efficiency, such as ducts, that are not described in the measurement category and not supplied with the fan.	Measurement category A, fan is free inlet and outlet conditions
16	Motor manufacturer	SHISHISHI TONGDA MOTOR CO.,LTD.

# ErP Information

Fan Types	Axial fan		
Directive (or Standard) for Regulation	ErP Directive 2009/125/EC COMMISSION REGULATION (EU) No 327/2011		
Model Name	ZKSN-170-8-3L	Rev.	
Prepare by			

Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	28.5%
2	Overall efficiency ( $\eta_e$ ) =	33.9%
3	Pass or not (Criteria: $\eta_e \geq \eta_{\text{target}}$ )	Pass
4	Measurement category (A-D)	A
5	Efficiency category (static or total)	Static
6	Efficiency grade at optimum energy efficiency point	N =45.4
7	VSD is integrated within the fan	YES
8	Year of Manufacture	Ref. to the Unit Nameplate
9	Manufacturer's name and place of manufacture	Ref. to the Unit Nameplate
10.1	Rated motor power input(s) (kW), at optimum energy efficiency	0.153kw
10.2	Rated motor flow rate(s) at optimum energy efficiency	1.248m <sup>3</sup> /s
10.3	Rated motor pressure(s) at optimum energy efficiency	36Pa
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	750r/min
12	Specific ratio	1.001
13	Information relevant for facilitating disassembly, recycling or disposal at end-of-life	all materials can be recycled
14	Information relevant to minimize impact on the environment and ensure optimal life expectancy as regards installation, use and maintenance of the fan	For installation, the clearance of 500 mm shall be kept from inlet
15	Description of additional items used when determining the fan energy efficiency, such as ducts, that are not described in the measurement category and not supplied with the fan.	Measurement category A, fan is free inlet and outlet conditions
16	Motor manufacturer	GUANGDONG WELLING MOTOR MANUFACTURING CO.,LTD.



## 印刷技术要求

材质	双胶纸80克
规格	210*297(双面)
颜色	黑白
其他	/

## 设计更改记录表 (仅做说明用, 不做菲林)

2025.03.17 张明祥

F-G

整本 ERP信息内机由V6更改为V8型号