



# **OWNER'S    MANUAL**

ERP INFORMATION

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

**⚠ CAUTION**

The manual is applicable for the cooling&heating and cooling only main unit. The cooling&heating indoor unit is applicable for the cooling&heating and the cooling only main unit; the heating capacity of the indoor unit will be effective only when the indoor unit connect to the cooling&heating main unit.

# CONTENTS

<b>1</b>	<b>ZKSN-560-10-1L+ ZL-608*200*20-4(Shangqi)</b> .....	<b>01</b>
<b>2</b>	<b>ZKSN-560-10-1L+ ZL-608*200*20-4(Welling)</b> .....	<b>02</b>
<b>3</b>	<b>ZKSN-560-10-1L+ ZL-750*210*20-4(Shangqi)</b> .....	<b>03</b>
<b>4</b>	<b>ZKSN-560-10-1L+ ZL-750*210*20-4(Welling)</b> .....	<b>04</b>
<b>5</b>	<b>ZKSN-920-10-2L+ ZL-608*200*20-4(Shangqi)</b> .....	<b>05</b>
<b>6</b>	<b>ZKSN-920-10-2L+ ZL-608*200*20-4(Panasonic)</b> .....	<b>06</b>
<b>7</b>	<b>ZKSN-920-10-2L+ ZL-608*200*20-4(Welling)</b> .....	<b>07</b>
<b>8</b>	<b>ZKSN-920-10-2L+ ZL-750*210*20-4(Shangqi)</b> .....	<b>08</b>
<b>9</b>	<b>ZKSN-920-10-2L+ ZL-750*210*20-4(Panasonic)</b> .....	<b>09</b>
<b>10</b>	<b>ZKSN-920-10-2L+ ZL-750*210*20-4(Welling)</b> .....	<b>10</b>
<b>11</b>	<b>ZKSN-2300-8-1+ ZL-750*210*20-4(Shangqi)</b> .....	<b>11</b>

## 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-560-10-1L+ ZL-608*200*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	30.14%
2	Overall efficiency ( $\eta_e$ ) =	34.55%
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 =43.4
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	0.276
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	5492
10.3	Pressure(s) at optimum energy efficiency (Pa)	60
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	800 r/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	Jiangsu Shangqi Group 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-560-10-1L+ ZL-608*200*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	30.09%
2	Overall efficiency ( $\eta_e$ ) =	33.57%
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 =42.5
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	0.271
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	5311
10.3	Pressure(s) at optimum energy efficiency (Pa)	60
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	800r/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.

## 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-560-10-1L+ ZL-750*210*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	31.67%
2	Overall efficiency ( $\eta_e$ ) =	34.81%
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 =41.9
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	0.482
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	8345
10.3	Pressure(s) at optimum energy efficiency (Pa)	70
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	650r/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	Jiangsu Shangqi Group 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-560-10-1L+ ZL-750*210*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	31.63%
2	Overall efficiency ( $\eta_e$ ) =	33.29%
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 =40.9
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	0.475
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	8567
10.3	Pressure(s) at optimum energy efficiency (Pa)	65
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	650r/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.

## 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-920-10-2L+ ZL-608*200*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	30.09%
2	Overall efficiency ( $\eta_e$ ) =	35.82%
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 =45.3
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	0.271
10.2	Flow rate(s) at optimum energy efficiency ( $\text{m}^3/\text{h}$ )	5238
10.3	Pressure(s) at optimum energy efficiency (Pa)	65
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	800r/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	Jiangsu Shangqi Group 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-920-10-2L+ ZL-608*200*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	30.07%
2	Overall efficiency ( $\eta_e$ ) =	35.39%
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 =44.7
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	0.269
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	5114
10.3	Pressure(s) at optimum energy efficiency (Pa)	65
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	800r/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	Panasonic Motor (HangZhou) 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-920-10-2L+ ZL-608*200*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	30.12%
2	Overall efficiency ( $\eta_e$ ) =	35.18%
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 =44.7
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	0.274
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	5312
10.3	Pressure(s) at optimum energy efficiency (Pa)	65
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	800r/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.

## 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-920-10-2L+ ZL-750*210*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	33.39%
2	Overall efficiency ( $\eta_e$ ) =	37.15%
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 =42.3
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	0.904
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	10570
10.3	Pressure(s) at optimum energy efficiency (Pa)	110
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	800r/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	Jiangsu Shangqi Group 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-920-10-2L+ ZL-750*210*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	33.26%
2	Overall efficiency ( $\eta_e$ ) =	36.48%
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 =41.8
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	0.862
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	10871
10.3	Pressure(s) at optimum energy efficiency (Pa)	100
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	800r/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	Panasonic Motor (HangZhou) 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-920-10-2L+ ZL-750*210*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	33.39%
2	Overall efficiency ( $\eta_e$ ) =	37.29%
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 =42.3
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	0.902
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	10462
10.3	Pressure(s) at optimum energy efficiency (Pa)	110
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	800r/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.

## 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-2300-8-1+ ZL-750*210*20-4	Rev.	
Prepare by			

### Specified Information of Fan:

No.	Information Item	Comment
1	$\eta_{\text{target}} =$	33.04%
2	Overall efficiency ( $\eta_e$ ) =	34.84%
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 =40.2
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	0.794
10.2	Flow rate(s) at optimum energy efficiency (m <sup>3</sup> /h)	13617
10.3	Pressure(s) at optimum energy efficiency (Pa)	70
11	Rotations per minute (R.P.M)at the optimum energy efficiency point	850r/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	Jiangsu Shangqi Group Co.,Ltd.





16100102A07916 V1.0

Systemair GmbH  
Seehöfer Straße 45  
DE-97944 Windischbuch  
GERMANY



