



# Ducted Packaged Units

## Part Load Data

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OPA 250, 350, 450, 560 Econex R32



**Cooling Capacity**  
10.1kW – 64.8kW



**Heating Capacity**  
6.5kW – 63.1kW

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

  = Nominal Capacity (kW)  
 Nominal Air Flow: 1250 l/s

**Note:** Total Capacity figures are gross and do not include allowance for fan motor heat loss.

### OPA 250 at Maximum Capacity (1250 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																	
E.A.T.		23			27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	26.6	19.0	8.0	26.1	19.1	8.4	25.6	19.2	8.9	25.0	19.2	9.5	24.3	19.1	10.1	23.6	18.9	10.7
	15	27.6	17.4	8.1	27.1	17.4	8.5	26.5	17.4	9.0	25.9	17.4	9.6	25.2	17.3	10.2	24.5	17.1	10.8
	16	28.6	15.4	8.2	28.0	15.5	8.6	27.4	15.4	9.1	26.8	15.3	9.7	26.1	15.2	10.3	25.3	15.1	11.0
	17	29.6	13.3	8.3	29.0	13.2	8.7	28.4	13.1	9.2	27.7	13.0	9.8	27.0	12.9	10.4	26.2	12.7	11.1
23	15	27.4	20.7	8.1	26.9	20.8	8.5	26.3	20.9	9.0	25.7	20.9	9.6	25.1	20.8	10.2	24.3	20.7	10.8
	16	28.3	19.1	8.1	27.7	19.2	8.6	27.2	19.2	9.1	26.5	19.2	9.6	25.8	19.1	10.3	25.1	19.0	10.9
	17	29.3	17.4	8.2	28.7	17.4	8.7	28.1	17.4	9.2	27.5	17.4	9.8	26.7	17.3	10.4	26.0	17.1	11.0
	18	30.3	15.4	8.3	29.7	15.4	8.8	29.1	15.4	9.3	28.4	15.3	9.9	27.7	15.2	10.5	26.9	15.0	11.2
27	18	30.2	22.5	8.3	29.6	22.6	8.8	29.0	22.7	9.3	28.3	22.7	9.9	27.5	22.7	10.5	26.8	22.6	11.1
	19	31.1	21.0	8.4	30.5	21.1	8.9	29.8	21.2	9.4	29.1	21.2	9.9	28.4	21.1	10.6	27.5	20.9	11.2
	20	32.0	19.3	8.5	31.4	19.4	9.0	30.7	19.4	9.5	30.0	19.4	10.0	29.2	19.3	10.7	28.3	19.1	11.3
	22	33.9	15.3	8.7	33.2	15.3	9.1	32.5	15.2	9.7	31.7	15.1	10.2	30.9	15.0	10.9	30.0	14.8	11.5
31	21	33.3	24.4	8.6	32.6	24.6	9.1	31.9	24.7	9.6	31.1	24.7	10.2	30.3	24.7	10.8	29.4	24.6	11.5
	22	34.1	22.9	8.7	33.4	23.0	9.1	32.6	23.1	9.7	31.9	23.1	10.2	31.0	23.1	10.9	30.1	22.9	11.6
	23	34.9	21.2	8.7	34.2	21.3	9.2	33.4	21.4	9.8	32.6	21.3	10.3	31.8	21.3	11.0	30.9	21.1	11.6
	25	36.7	17.4	8.9	35.9	17.4	9.4	35.1	17.3	9.9	34.3	17.3	10.5	33.4	17.2	11.1	32.5	17.0	11.8

### OPA 250 at Nominal Capacity (1250 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																	
E.A.T.		23			27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	23.3	18.0	6.1	22.8	18.0	6.5	22.4	18.1	6.9	21.8	18.0	7.4	21.3	17.9	7.9	20.7	17.8	8.5
	15	24.1	16.6	6.2	23.6	16.6	6.6	23.1	16.6	7.0	22.6	16.5	7.5	22.0	16.4	8.0	21.4	16.2	8.5
	16	25.0	14.9	6.2	24.5	14.9	6.6	23.9	14.8	7.1	23.4	14.7	7.5	22.8	14.6	8.0	22.1	14.4	8.6
	17	25.8	13.1	6.3	25.3	13.0	6.7	24.8	12.9	7.1	24.2	12.8	7.6	23.6	12.6	8.1	22.9	12.4	8.7
23	15	24.0	19.5	6.2	23.5	19.5	6.6	23.0	19.6	7.0	22.5	19.6	7.5	21.9	19.5	8.0	21.3	19.3	8.5
	16	24.7	18.1	6.2	24.2	18.2	6.6	23.7	18.1	7.0	23.2	18.1	7.5	22.6	18.0	8.0	21.9	17.8	8.6
	17	25.6	16.7	6.3	25.1	16.7	6.7	24.5	16.6	7.1	24.0	16.5	7.6	23.3	16.4	8.1	22.7	16.2	8.7
	18	26.5	15.0	6.3	25.9	15.0	6.7	25.4	14.9	7.2	24.8	14.8	7.6	24.1	14.6	8.2	23.4	14.4	8.7
27	18	26.3	21.1	6.3	25.8	21.2	6.7	25.2	21.3	7.2	24.6	21.2	7.6	24.0	21.2	8.2	23.3	21.0	8.7
	19	27.1	19.9	6.4	26.5	19.9	6.8	26.0	19.9	7.2	25.4	19.9	7.7	24.7	19.8	8.2	24.0	19.6	8.8
	20	27.9	18.5	6.4	27.3	18.5	6.8	26.7	18.4	7.3	26.1	18.4	7.8	25.4	18.3	8.3	24.7	18.1	8.9
	22	29.5	15.0	6.5	28.9	15.0	6.9	28.2	14.9	7.4	27.5	14.7	7.9	26.8	14.6	8.4	26.1	14.4	9.0
31	21	28.9	22.9	6.5	28.3	23.0	6.9	27.7	23.1	7.3	27.0	23.1	7.8	26.4	23.0	8.4	25.6	22.8	8.9
	22	29.6	21.6	6.5	29.0	21.7	6.9	28.3	21.7	7.4	27.7	21.7	7.9	27.0	21.6	8.4	26.2	21.5	9.0
	23	30.3	20.2	6.6	29.6	20.2	7.0	29.0	20.2	7.4	28.3	20.2	7.9	27.6	20.1	8.5	26.8	19.9	9.0
	25	31.8	16.9	6.6	31.1	16.9	7.1	30.4	16.8	7.5	29.7	16.7	8.0	29.0	16.6	8.6	28.1	16.4	9.2

# Performance Data at part load

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
SC = Sensible Capacity (kW).  
PI = Power Input (kW)  
E.A.T. = Entering Air Temperature .

Nominal Air Flow: **1250 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 250 at Nominal less 10% (1250 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °c db																	
E.A.T.		23			27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	21.0	17.2	5.1	20.6	17.2	5.4	20.2	17.2	5.8	19.7	17.2	6.2	19.2	17.1	6.6	18.7	16.9	7.1
	15	21.7	15.9	5.2	21.3	15.9	5.5	20.9	15.9	5.8	20.4	15.8	6.2	19.9	15.7	6.7	19.3	15.5	7.1
	16	22.5	14.5	5.2	22.0	14.4	5.5	21.6	14.4	5.9	21.1	14.3	6.3	20.6	14.1	6.7	20.0	13.9	7.2
	17	23.3	12.8	5.2	22.8	12.7	5.6	22.3	12.6	5.9	21.8	12.5	6.3	21.2	12.3	6.8	20.7	12.1	7.2
23	15	21.6	18.5	5.2	21.2	18.6	5.5	20.8	18.6	5.8	20.3	18.6	6.2	19.8	18.5	6.7	19.3	18.3	7.1
	16	22.3	17.3	5.2	21.8	17.4	5.5	21.4	17.3	5.9	20.9	17.3	6.3	20.4	17.2	6.7	19.8	17.0	7.2
	17	23.0	16.1	5.2	22.6	16.0	5.6	22.1	16.0	5.9	21.6	15.9	6.3	21.0	15.8	6.8	20.5	15.6	7.2
	18	23.8	14.6	5.3	23.3	14.5	5.6	22.8	14.4	6.0	22.3	14.3	6.4	21.7	14.2	6.8	21.2	14.0	7.3
27	18	23.7	20.1	5.3	23.2	20.2	5.6	22.7	20.2	6.0	22.2	20.1	6.4	21.6	20.1	6.8	21.1	19.9	7.3
	19	24.4	19.0	5.3	23.9	19.0	5.6	23.4	19.0	6.0	22.8	19.0	6.4	22.2	18.9	6.8	21.6	18.7	7.3
	20	25.1	17.7	5.3	24.5	17.7	5.7	24.0	17.7	6.0	23.5	17.6	6.4	22.9	17.5	6.9	22.2	17.3	7.4
	22	26.5	14.7	5.4	25.9	14.6	5.7	25.3	14.5	6.1	24.7	14.4	6.5	24.1	14.2	7.0	23.5	14.0	7.5
31	21	26.0	21.8	5.4	25.4	21.9	5.7	24.9	21.9	6.1	24.3	21.8	6.5	23.7	21.8	7.0	23.1	21.6	7.4
	22	26.6	20.7	5.4	26.0	20.7	5.7	25.5	20.7	6.1	24.9	20.6	6.5	24.2	20.5	7.0	23.6	20.4	7.5
	23	27.2	19.4	5.4	26.6	19.4	5.8	26.0	19.4	6.2	25.4	19.3	6.6	24.8	19.2	7.0	24.1	19.0	7.5
	25	28.5	16.5	5.5	27.9	16.4	5.8	27.3	16.3	6.2	26.7	16.2	6.6	26.0	16.1	7.1	25.3	15.9	7.6

### OPA 250 at Nominal less 20% (1250 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																	
E.A.T.		23			27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	18.7	16.2	4.4	18.3	16.2	4.7	17.9	16.1	5.0	17.5	16.1	5.3	17.1	16.0	5.7	16.6	15.8	6.1
	15	19.3	15.1	4.4	18.9	15.0	4.7	18.5	15.0	5.0	18.1	14.9	5.4	17.7	14.8	5.7	17.2	14.6	6.1
	16	20.0	13.8	4.4	19.6	13.7	4.7	19.2	13.7	5.1	18.7	13.5	5.4	18.3	13.4	5.8	17.8	13.2	6.2
	17	20.7	12.4	4.5	20.2	12.3	4.8	19.8	12.1	5.1	19.4	12.0	5.4	18.9	11.8	5.8	18.4	11.6	6.2
23	15	19.2	17.4	4.4	18.9	17.4	4.7	18.5	17.4	5.0	18.0	17.3	5.4	17.6	16.9	5.7	17.1	16.4	6.1
	16	19.8	16.4	4.4	19.4	16.3	4.7	19.0	16.3	5.0	18.6	16.2	5.4	18.1	16.1	5.8	17.6	15.9	6.2
	17	20.5	15.2	4.5	20.1	15.2	4.8	19.6	15.1	5.1	19.2	15.0	5.4	18.7	14.9	5.8	18.2	14.7	6.2
	18	21.2	14.0	4.5	20.7	13.9	4.8	20.3	13.8	5.1	19.8	13.6	5.5	19.3	13.5	5.8	18.8	13.3	6.3
27	18	21.1	18.9	4.5	20.6	18.9	4.8	20.2	18.9	5.1	19.7	18.8	5.5	19.2	18.5	5.8	18.7	18.0	6.2
	19	21.6	17.9	4.5	21.2	17.9	4.8	20.7	17.8	5.1	20.3	17.8	5.5	19.8	17.7	5.9	19.2	17.5	6.3
	20	22.2	16.8	4.5	21.8	16.8	4.8	21.3	16.7	5.2	20.8	16.6	5.5	20.3	16.5	5.9	19.7	16.3	6.3
	22	23.5	14.2	4.6	23.0	14.1	4.9	22.5	13.9	5.2	21.9	13.8	5.6	21.4	13.6	6.0	20.8	13.4	6.4
31	21	23.1	20.4	4.5	22.6	20.5	4.9	22.1	20.4	5.2	21.6	20.4	5.6	21.0	20.3	5.9	20.5	19.7	6.4
	22	23.6	19.5	4.6	23.1	19.4	4.9	22.6	19.4	5.2	22.0	19.3	5.6	21.5	19.2	6.0	20.9	19.1	6.4
	23	24.1	18.3	4.6	23.6	18.3	4.9	23.1	18.3	5.2	22.5	18.2	5.6	22.0	18.0	6.0	21.4	17.9	6.4
	25	25.3	15.8	4.6	24.7	15.7	4.9	24.2	15.6	5.3	23.6	15.5	5.6	23.0	15.3	6.0	22.4	15.1	6.5

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

Nominal Air Flow: **1250 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss. .

### OPA 250 at Nominal less 30% (1250 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																				
E.A.T.		23						27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI			
21	14	16.7	15.0	3.9	16.3	15.0	4.1	16.0	14.9	4.4	15.6	14.9	4.6	15.3	14.5	4.9	14.9	14.1	5.3			
	15	17.2	14.0	3.9	16.9	14.0	4.1	16.5	13.9	4.4	16.2	13.8	4.7	15.8	13.7	5.0	15.4	13.6	5.3			
	16	17.8	12.9	3.9	17.4	12.8	4.2	17.1	12.7	4.4	16.7	12.6	4.7	16.3	12.5	5.0	15.9	12.3	5.4			
	17	18.4	11.7	3.9	18.0	11.5	4.2	17.6	11.4	4.4	17.2	11.3	4.7	16.8	11.1	5.1	16.4	10.9	5.4			
23	15	17.1	16.1	3.9	16.8	16.1	4.1	16.4	15.7	4.4	16.1	15.3	4.7	15.7	15.0	5.0	15.3	14.5	5.3			
	16	17.6	15.2	3.9	17.3	15.1	4.1	16.9	15.1	4.4	16.5	15.0	4.7	16.1	14.9	5.0	15.7	14.8	5.3			
	17	18.2	14.2	3.9	17.8	14.1	4.2	17.5	14.1	4.4	17.1	14.0	4.7	16.7	13.8	5.0	16.2	13.7	5.4			
	18	18.8	13.1	3.9	18.4	13.0	4.2	18.0	12.9	4.5	17.6	12.7	4.8	17.2	12.6	5.1	16.7	12.4	5.4			
27	18	18.7	17.4	3.9	18.3	17.4	4.2	18.0	17.2	4.5	17.5	16.8	4.8	17.1	16.4	5.1	16.7	15.9	5.4			
	19	19.3	16.6	4.0	18.9	16.6	4.2	18.4	16.5	4.5	18.0	16.4	4.8	17.6	16.3	5.1	17.1	16.2	5.4			
	20	19.8	15.6	4.0	19.4	15.6	4.2	18.9	15.5	4.5	18.5	15.4	4.8	18.1	15.3	5.1	17.6	15.1	5.5			
	22	20.9	13.3	4.0	20.4	13.2	4.3	20.0	13.1	4.5	19.5	12.9	4.8	19.0	12.8	5.2	18.5	12.6	5.5			
31	21	20.5	18.9	4.0	20.1	18.9	4.2	19.6	18.9	4.5	19.2	18.4	4.8	18.7	18.0	5.2	18.2	17.5	5.5			
	22	20.9	18.0	4.0	20.5	18.0	4.3	20.1	17.9	4.5	19.6	17.9	4.8	19.1	17.8	5.2	18.6	17.6	5.5			
	23	21.4	17.0	4.0	21.0	17.0	4.3	20.5	16.9	4.6	20.0	16.8	4.9	19.5	16.7	5.2	19.0	16.6	5.5			
	25	22.4	14.8	4.0	22.0	14.7	4.3	21.5	14.6	4.6	21.0	14.5	4.9	20.5	14.3	5.2	19.9	14.1	5.6			

### OPA 250 at Nominal less 40% (1250 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																				
E.A.T.		23						27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI			
21	14	14.2	12.9	3.2	13.9	12.9	3.5	13.5	12.8	3.7	13.2	12.5	3.9	12.9	12.2	4.2	12.5	11.8	4.5			
	15	14.7	12.1	3.2	14.3	12.0	3.5	14.0	12.0	3.7	13.7	11.9	4.0	13.3	11.7	4.2	13.0	11.6	4.5			
	16	15.2	11.2	3.3	14.8	11.1	3.5	14.5	11.0	3.7	14.1	10.9	4.0	13.8	10.7	4.3	13.4	10.6	4.6			
	17	15.7	10.1	3.3	15.3	10.0	3.5	14.9	9.9	3.7	14.6	9.7	4.0	14.2	9.6	4.3	13.8	9.4	4.6			
23	15	14.6	13.9	3.2	14.3	13.5	3.5	13.9	13.2	3.7	13.6	12.9	4.0	13.3	12.5	4.2	12.9	12.2	4.5			
	16	15.0	13.1	3.3	14.7	13.0	3.5	14.3	13.0	3.7	14.0	12.9	4.0	13.6	12.7	4.2	13.3	12.5	4.5			
	17	15.5	12.3	3.3	15.2	12.2	3.5	14.8	12.1	3.7	14.4	12.0	4.0	14.1	11.8	4.3	13.7	11.7	4.6			
	18	16.0	11.3	3.2	15.6	11.2	3.5	15.3	11.1	3.7	14.9	11.0	4.0	14.5	10.8	4.3	14.1	10.6	4.6			
27	18	15.9	15.0	3.2	15.6	14.8	3.5	15.2	14.5	3.7	14.8	14.1	4.0	14.5	13.7	4.3	14.1	13.3	4.6			
	19	16.4	14.3	3.2	16.0	14.3	3.5	15.6	14.2	3.7	15.2	14.1	4.0	14.8	14.0	4.3	14.4	13.7	4.6			
	20	16.8	13.5	3.2	16.4	13.4	3.5	16.0	13.3	3.7	15.6	13.2	4.0	15.2	13.1	4.3	14.8	12.9	4.6			
	22	17.7	11.6	3.2	17.3	11.4	3.5	16.9	11.3	3.7	16.5	11.1	4.0	16.0	11.0	4.3	15.6	10.8	4.6			
31	21	17.4	16.3	3.2	17.0	16.2	3.5	16.6	15.9	3.7	16.2	15.5	4.0	15.8	15.0	4.3	15.3	14.6	4.6			
	22	17.8	15.6	3.2	17.4	15.5	3.5	17.0	15.4	3.7	16.5	15.3	4.0	16.1	15.2	4.3	15.7	14.9	4.6			
	23	18.2	14.8	3.2	17.8	14.7	3.5	17.3	14.6	3.7	16.9	14.4	4.0	16.5	14.3	4.3	16.0	14.1	4.6			
	25	19.1	12.9	3.2	18.6	12.8	3.5	18.2	12.6	3.7	17.7	12.5	4.0	17.2	12.3	4.3	16.8	12.1	4.7			

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

Nominal Air Flow: **1250 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 250 at Nominal less 50% (1250 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	11.3	10.5	2.7	11.1	10.3	2.9	10.8	10.1	3.1	10.5	9.8	3.3	10.3	9.6	3.5	10.0	9.3	3.7
	15	11.7	9.9	2.7	11.4	9.8	2.9	11.1	9.7	3.1	10.9	9.6	3.3	10.6	9.5	3.5	10.3	9.4	3.7
	16	12.1	9.1	2.7	11.8	9.0	2.9	11.5	8.9	3.1	11.2	8.8	3.3	11.0	8.7	3.5	10.7	8.6	3.7
	17	12.5	8.3	2.7	12.2	8.1	2.9	11.9	8.0	3.1	11.6	7.9	3.3	11.3	7.8	3.5	11.0	7.6	3.7
23	15	11.6	10.9	2.7	11.4	10.6	2.9	11.1	10.4	3.1	10.8	10.1	3.3	10.6	9.8	3.5	10.3	9.6	3.7
	16	12.0	10.6	2.7	11.7	10.6	2.9	11.4	10.5	3.1	11.1	10.4	3.3	10.9	10.1	3.5	10.6	9.9	3.7
	17	12.3	10.0	2.7	12.1	9.9	2.9	11.8	9.8	3.1	11.5	9.7	3.3	11.2	9.6	3.5	10.9	9.5	3.7
	18	12.7	9.2	2.7	12.4	9.1	2.9	12.1	9.0	3.1	11.8	8.9	3.3	11.5	8.8	3.5	11.2	8.6	3.7
27	18	12.7	12.0	2.7	12.4	11.7	2.9	12.1	11.4	3.1	11.8	11.1	3.3	11.5	10.8	3.5	11.2	10.5	3.7
	19	13.0	11.6	2.7	12.7	11.5	2.9	12.4	11.5	3.1	12.1	11.4	3.3	11.8	11.1	3.5	11.5	10.8	3.7
	20	13.4	11.0	2.7	13.0	10.9	2.9	12.7	10.8	3.1	12.4	10.7	3.3	12.1	10.6	3.5	11.8	10.5	3.7
	22	14.1	9.4	2.7	13.7	9.3	2.9	13.4	9.2	3.1	13.1	9.1	3.3	12.7	8.9	3.5	12.4	8.8	3.7
31	21	13.8	13.1	2.7	13.5	12.8	2.9	13.2	12.5	3.1	12.8	12.1	3.3	12.5	11.8	3.5	12.2	11.5	3.7
	22	14.1	12.6	2.7	13.8	12.5	2.9	13.5	12.4	3.1	13.1	12.4	3.3	12.8	12.1	3.5	12.4	11.7	3.7
	23	14.4	12.0	2.6	14.1	11.9	2.8	13.7	11.8	3.1	13.4	11.7	3.3	13.1	11.6	3.5	12.7	11.4	3.7
	25	15.1	10.5	2.6	14.7	10.4	2.8	14.4	10.2	3.0	14.0	10.1	3.3	13.7	10.0	3.5	13.3	9.8	3.7

### OPA 250 at Minimum capacity (1250 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	9.5	8.7	2.5	9.3	8.6	2.6	9.1	8.3	2.8	8.9	8.1	2.9	8.6	7.9	3.1	8.4	7.7	3.3
	15	9.8	8.1	2.5	9.6	8.1	2.6	9.4	8.0	2.8	9.1	7.9	2.9	8.9	7.9	3.1	8.7	7.8	3.3
	16	10.1	7.5	2.5	9.9	7.4	2.6	9.7	7.4	2.8	9.4	7.3	2.9	9.2	7.2	3.1	9.0	7.1	3.3
	17	10.5	6.8	2.5	10.2	6.7	2.6	10.0	6.6	2.8	9.7	6.5	2.9	9.5	6.4	3.1	9.2	6.3	3.3
23	15	9.8	9.0	2.5	9.5	8.8	2.6	9.3	8.6	2.8	9.1	8.4	2.9	8.9	8.1	3.1	8.6	7.9	3.3
	16	10.0	8.8	2.5	9.8	8.7	2.6	9.6	8.7	2.8	9.3	8.6	2.9	9.1	8.4	3.1	8.9	8.1	3.3
	17	10.4	8.2	2.5	10.1	8.2	2.6	9.9	8.1	2.8	9.6	8.0	2.9	9.4	7.9	3.1	9.2	7.8	3.3
	18	10.7	7.6	2.4	10.4	7.5	2.6	10.2	7.4	2.8	9.9	7.3	2.9	9.7	7.2	3.1	9.4	7.1	3.3
27	18	10.6	9.9	2.4	10.4	9.7	2.6	10.1	9.4	2.8	9.9	9.2	2.9	9.6	8.9	3.1	9.4	8.7	3.3
	19	10.9	9.6	2.4	10.7	9.5	2.6	10.4	9.5	2.8	10.1	9.4	2.9	9.9	9.2	3.1	9.6	8.9	3.3
	20	11.2	9.1	2.4	10.9	9.0	2.6	10.7	8.9	2.8	10.4	8.8	2.9	10.1	8.7	3.1	9.9	8.6	3.3
	22	11.8	7.8	2.4	11.5	7.7	2.6	11.2	7.6	2.7	10.9	7.5	2.9	10.7	7.3	3.1	10.4	7.2	3.3
31	21	11.6	10.9	2.4	11.3	10.6	2.6	11.0	10.3	2.7	10.8	10.0	2.9	10.5	9.8	3.1	10.2	9.5	3.3
	22	11.8	10.4	2.4	11.5	10.4	2.6	11.3	10.3	2.7	11.0	10.2	2.9	10.7	10.0	3.1	10.4	9.7	3.3
	23	12.1	9.9	2.4	11.8	9.8	2.6	11.5	9.7	2.7	11.2	9.6	2.9	10.9	9.6	3.1	10.6	9.4	3.3
	25	12.6	8.6	2.4	12.3	8.5	2.5	12.0	8.4	2.7	11.7	8.3	2.9	11.4	8.2	3.1	11.1	8.1	3.3

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

  = Nominal Capacity (kW)  
 Nominal Air Flow: **1800 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 350 at Maximum Capacity (1800 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																	
E.A.T.		23			27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	41.2	28.8	13.6	40.3	28.9	14.5	39.4	28.9	15.4	38.4	28.9	16.4	37.4	28.8	17.5	36.3	28.5	18.6
	15	42.7	26.2	13.7	41.8	26.2	14.6	40.8	26.2	15.6	39.8	26.1	16.6	38.7	26.0	17.7	37.6	25.7	18.8
	16	44.2	23.2	13.8	43.3	23.2	14.8	42.3	23.1	15.7	41.2	23.0	16.8	40.1	22.8	17.9	38.9	22.5	19.0
	17	45.8	19.8	14.0	44.8	19.7	14.9	43.8	19.6	15.9	42.7	19.4	16.9	41.5	19.1	18.0	40.3	18.9	19.2
23	15	42.5	31.3	13.7	41.6	31.5	14.6	40.6	31.5	15.6	39.6	31.5	16.6	38.5	31.4	17.6	37.4	31.2	18.8
	16	43.8	28.9	13.8	42.8	28.9	14.7	41.8	28.9	15.7	40.8	28.9	16.7	39.7	28.7	17.8	38.5	28.5	18.9
	17	45.4	26.2	13.9	44.4	26.2	14.9	43.3	26.2	15.8	42.2	26.1	16.9	41.1	25.9	18.0	39.9	25.7	19.1
	18	47.0	23.1	14.0	45.9	23.1	15.0	44.9	23.0	16.0	43.7	22.9	17.1	42.5	22.6	18.2	41.3	22.4	19.3
27	18	46.7	34.1	14.0	45.7	34.2	15.0	44.6	34.3	16.0	43.5	34.3	17.0	42.3	34.2	18.1	41.1	34.0	19.3
	19	48.1	31.8	14.1	47.1	31.9	15.1	46.0	31.9	16.1	44.8	31.8	17.2	43.6	31.7	18.3	42.3	31.5	19.5
	20	49.5	29.1	14.2	48.5	29.2	15.2	47.3	29.2	16.2	46.1	29.1	17.3	44.9	28.9	18.4	43.5	28.7	19.6
	22	52.5	22.9	14.4	51.3	22.8	15.4	50.1	22.7	16.5	48.8	22.5	17.6	47.5	22.3	18.7	46.1	22.0	20.0
31	21	51.5	37.0	14.4	50.4	37.2	15.4	49.2	37.3	16.4	47.9	37.3	17.5	46.6	37.2	18.6	45.2	37.0	19.8
	22	52.7	34.6	14.4	51.6	34.8	15.4	50.3	34.9	16.5	49.1	34.8	17.6	47.7	34.7	18.8	46.3	34.5	20.0
	23	54.0	32.0	14.5	52.8	32.1	15.5	51.5	32.1	16.6	50.2	32.1	17.7	48.8	31.9	18.9	47.4	31.7	20.1
	25	56.8	26.0	14.7	55.6	26.0	15.7	54.2	25.9	16.8	52.9	25.8	18.0	51.4	25.6	19.2	49.9	25.3	20.4

### OPA 350 at Nominal Capacity (1800 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																	
E.A.T.		23			27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	33.0	25.2	8.8	32.3	25.3	9.4	31.6	25.3	10.0	30.9	25.3	10.7	30.2	25.2	11.4	29.4	25.0	12.2
	15	34.1	23.2	8.8	33.5	23.2	9.4	32.7	23.2	10.1	32.0	23.1	10.8	31.2	22.9	11.5	30.4	22.8	12.3
	16	35.3	20.9	8.8	34.6	20.8	9.5	33.9	20.7	10.2	33.1	20.6	10.9	32.3	20.4	11.6	31.4	20.2	12.4
	17	36.5	18.2	8.9	35.8	18.1	9.5	35.0	18.0	10.2	34.2	17.8	10.9	33.4	17.6	11.7	32.5	17.3	12.5
23	15	34.0	27.3	8.8	33.3	27.4	9.4	32.6	27.4	10.1	31.8	27.4	10.8	31.1	27.3	11.5	30.2	27.2	12.3
	16	35.0	25.3	8.8	34.3	25.4	9.5	33.6	25.4	10.1	32.8	25.3	10.8	32.0	25.2	11.6	31.1	25.1	12.4
	17	36.2	23.3	8.9	35.5	23.3	9.5	34.7	23.2	10.2	33.9	23.1	10.9	33.1	23.0	11.7	32.2	22.8	12.5
	18	37.4	20.9	8.9	36.7	20.9	9.6	35.9	20.8	10.3	35.1	20.6	11.0	34.2	20.4	11.8	33.3	20.2	12.6
27	18	37.3	29.6	8.9	36.5	29.7	9.6	35.7	29.8	10.3	34.9	29.8	11.0	34.0	29.7	11.8	33.1	29.5	12.6
	19	38.3	27.8	8.9	37.6	27.9	9.6	36.8	27.9	10.3	35.9	27.9	11.1	35.0	27.8	11.8	34.0	27.6	12.6
	20	39.4	25.8	9.0	38.6	25.8	9.7	37.8	25.8	10.4	36.9	25.7	11.1	36.0	25.6	11.9	35.0	25.4	12.7
	22	41.7	20.9	9.0	40.9	20.9	9.7	40.0	20.7	10.5	39.0	20.6	11.2	38.0	20.4	12.1	37.0	20.1	12.9
31	21	40.9	32.1	9.0	40.1	32.3	9.7	39.2	32.4	10.4	38.3	32.4	11.2	37.3	32.3	12.0	36.3	32.1	12.8
	22	41.9	30.3	9.0	41.1	30.4	9.7	40.2	30.5	10.5	39.2	30.4	11.3	38.2	30.3	12.1	37.2	30.1	12.9
	23	42.9	28.3	9.1	42.0	28.3	9.8	41.1	28.3	10.5	40.1	28.3	11.3	39.1	28.1	12.1	38.0	27.9	13.0
	25	45.1	23.6	9.1	44.2	23.6	9.9	43.2	23.5	10.6	42.2	23.3	11.4	41.1	23.2	12.3	39.9	22.9	13.1



## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

Nominal Air Flow: **1800 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 350 at Nominal less 10% (1800 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	29.6	23.6	7.5	29.1	23.6	8.1	28.5	23.6	8.7	27.8	23.6	9.3	27.2	23.5	10.0	26.5	23.3	10.7
	15	30.7	21.8	7.5	30.1	21.8	8.1	29.5	21.7	8.7	28.8	21.6	9.4	28.1	21.5	10.1	27.4	21.3	10.8
	16	31.7	19.7	7.6	31.1	19.7	8.1	30.5	19.6	8.8	29.8	19.4	9.4	29.1	19.3	10.1	28.3	19.0	10.9
	17	32.8	17.4	7.6	32.2	17.3	8.2	31.5	17.1	8.8	30.8	16.9	9.5	30.0	16.7	10.2	29.2	16.5	10.9
23	15	30.5	25.4	7.5	29.9	25.5	8.1	29.3	25.6	8.7	28.7	25.5	9.4	28.0	25.5	10.0	27.2	25.3	10.8
	16	31.4	23.7	7.5	30.8	23.8	8.1	30.2	23.8	8.8	29.5	23.7	9.4	28.8	23.6	10.1	28.0	23.4	10.8
	17	32.5	21.9	7.6	31.9	21.9	8.2	31.2	21.8	8.8	30.5	21.7	9.5	29.8	21.6	10.2	29.0	21.4	10.9
	18	33.6	19.8	7.6	33.0	19.8	8.2	32.3	19.7	8.8	31.5	19.5	9.5	30.8	19.3	10.2	29.9	19.1	11.0
27	18	33.5	27.6	7.6	32.8	27.7	8.2	32.1	27.8	8.8	31.4	27.8	9.5	30.6	27.7	10.2	29.8	27.5	11.0
	19	34.4	26.0	7.6	33.8	26.1	8.2	33.1	26.1	8.9	32.3	26.1	9.5	31.5	25.9	10.3	30.6	25.7	11.0
	20	35.4	24.3	7.6	34.7	24.3	8.2	34.0	24.2	8.9	33.2	24.1	9.6	32.4	24.0	10.3	31.5	23.8	11.1
	22	37.5	20.0	7.6	36.7	19.9	8.3	35.9	19.7	9.0	35.1	19.6	9.7	34.2	19.4	10.4	33.3	19.1	11.2
31	21	36.8	30.0	7.6	36.1	30.1	8.3	35.3	30.2	8.9	34.5	30.2	9.6	33.6	30.0	10.4	32.7	29.9	11.2
	22	37.6	28.4	7.6	36.9	28.5	8.3	36.1	28.5	9.0	35.3	28.4	9.7	34.4	28.3	10.4	33.4	28.1	11.2
	23	38.5	26.6	7.6	37.8	26.6	8.3	36.9	26.6	9.0	36.1	26.5	9.7	35.1	26.4	10.5	34.2	26.1	11.3
	25	40.5	22.5	7.6	39.7	22.4	8.3	38.8	22.3	9.0	37.9	22.2	9.8	36.9	21.9	10.6	35.9	21.7	11.4

### OPA 350 at Nominal less 20% (1800 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	26.4	21.9	6.5	25.9	21.9	7.0	25.3	21.9	7.5	24.8	21.9	8.1	24.2	21.8	8.6	23.6	21.6	9.2
	15	27.3	20.3	6.6	26.8	20.3	7.1	26.2	20.3	7.6	25.7	20.2	8.1	25.0	20.0	8.7	24.4	19.9	9.3
	16	28.2	18.5	6.6	27.7	18.5	7.1	27.1	18.4	7.6	26.5	18.2	8.2	25.9	18.1	8.7	25.2	17.9	9.4
	17	29.2	16.5	6.6	28.6	16.4	7.1	28.0	16.2	7.6	27.4	16.1	8.2	26.8	15.8	8.8	26.1	15.6	9.4
23	15	27.1	23.6	6.6	26.6	23.7	7.0	26.1	23.7	7.6	25.5	23.6	8.1	24.9	23.6	8.7	24.3	23.2	9.3
	16	27.9	22.1	6.6	27.4	22.1	7.1	26.9	22.1	7.6	26.3	22.0	8.1	25.6	21.9	8.7	25.0	21.7	9.3
	17	28.9	20.5	6.6	28.4	20.5	7.1	27.8	20.4	7.6	27.2	20.3	8.2	26.5	20.2	8.8	25.8	20.0	9.4
	18	29.9	18.7	6.6	29.3	18.6	7.1	28.7	18.5	7.7	28.1	18.4	8.2	27.4	18.2	8.8	26.7	17.9	9.5
27	18	29.7	25.6	6.6	29.2	25.7	7.1	28.6	25.7	7.6	27.9	25.7	8.2	27.3	25.6	8.8	26.5	25.4	9.5
	19	30.6	24.2	6.6	30.0	24.3	7.1	29.4	24.3	7.7	28.7	24.2	8.3	28.0	24.1	8.9	27.3	23.9	9.5
	20	31.5	22.7	6.6	30.9	22.7	7.1	30.2	22.6	7.7	29.5	22.5	8.3	28.8	22.4	8.9	28.0	22.2	9.6
	22	33.3	18.9	6.6	32.6	18.8	7.2	32.0	18.7	7.7	31.2	18.5	8.3	30.4	18.3	9.0	29.6	18.1	9.6
31	21	32.7	27.8	6.6	32.0	27.9	7.2	31.4	28.0	7.7	30.7	27.9	8.3	29.9	27.8	9.0	29.1	27.6	9.6
	22	33.4	26.4	6.6	32.8	26.5	7.2	32.1	26.5	7.7	31.4	26.4	8.3	30.6	26.3	9.0	29.7	26.1	9.7
	23	34.2	24.9	6.6	33.5	24.9	7.2	32.8	24.8	7.8	32.1	24.8	8.4	31.3	24.6	9.0	30.4	24.4	9.7
	25	36.0	21.3	6.6	35.3	21.2	7.2	34.5	21.1	7.8	33.7	20.9	8.4	32.8	20.7	9.1	31.9	20.5	9.8

# Performance Data at part load

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
SC = Sensible Capacity (kW).  
PI = Power Input (kW)  
E.A.T. = Entering Air Temperature .

Nominal Air Flow: **1800 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 350 at Nominal less 30% (1800 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	23.0	20.4	5.7	22.6	20.4	6.1	22.2	20.4	6.5	21.7	20.3	7.0	21.2	20.1	7.5	20.6	19.6	8.1
	15	23.8	19.1	5.7	23.4	19.0	6.1	22.9	19.0	6.6	22.4	18.9	7.1	21.9	18.7	7.6	21.3	18.5	8.1
	16	24.7	17.5	5.7	24.2	17.5	6.1	23.7	17.4	6.6	23.2	17.2	7.1	22.6	17.0	7.6	22.1	16.8	8.2
	17	25.5	15.8	5.6	25.0	15.7	6.1	24.5	15.5	6.6	24.0	15.4	7.1	23.4	15.1	7.6	22.8	14.9	8.2
23	15	23.7	21.9	5.7	23.3	22.0	6.1	22.8	21.8	6.6	22.3	21.3	7.1	21.8	20.7	7.6	21.2	20.2	8.1
	16	24.4	20.6	5.7	24.0	20.7	6.1	23.5	20.6	6.6	23.0	20.5	7.1	22.4	20.4	7.6	21.8	20.2	8.2
	17	25.3	19.3	5.6	24.8	19.3	6.1	24.3	19.2	6.6	23.8	19.1	7.1	23.2	18.9	7.6	22.6	18.7	8.2
	18	26.1	17.8	5.6	25.6	17.7	6.1	25.1	17.6	6.6	24.6	17.4	7.1	24.0	17.2	7.7	23.3	17.0	8.2
27	18	26.0	23.8	5.6	25.5	23.9	6.1	25.0	23.9	6.6	24.4	23.4	7.1	23.8	22.8	7.7	23.2	22.1	8.2
	19	26.8	22.7	5.6	26.3	22.7	6.1	25.7	22.7	6.6	25.1	22.6	7.1	24.5	22.4	7.7	23.9	22.2	8.3
	20	27.5	21.4	5.6	27.0	21.3	6.1	26.4	21.3	6.6	25.8	21.1	7.2	25.2	21.0	7.7	24.5	20.7	8.3
	22	29.1	18.2	5.6	28.6	18.1	6.1	28.0	17.9	6.6	27.3	17.7	7.2	26.6	17.5	7.8	25.9	17.2	8.4
31	21	28.6	25.9	5.6	28.0	26.0	6.1	27.4	26.0	6.6	26.8	25.7	7.2	26.1	25.1	7.7	25.4	24.3	8.3
	22	29.2	24.7	5.6	28.7	24.8	6.1	28.1	24.7	6.6	27.4	24.6	7.2	26.7	24.5	7.8	26.0	24.2	8.4
	23	29.9	23.4	5.6	29.3	23.4	6.1	28.7	23.3	6.6	28.1	23.2	7.2	27.3	23.0	7.8	26.6	22.8	8.4
	25	31.5	20.4	5.6	30.9	20.3	6.1	30.2	20.1	6.6	29.5	19.9	7.2	28.7	19.7	7.8	27.9	19.4	8.5

### OPA 350 at Nominal less 40% (1800 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	19.7	18.5	4.9	19.4	18.3	5.3	19.0	17.9	5.7	18.6	17.5	6.1	18.2	17.1	6.5	17.7	16.7	7.0
	15	20.4	17.4	4.9	20.1	17.4	5.3	19.7	17.3	5.7	19.3	17.2	6.1	18.8	17.0	6.5	18.3	16.9	7.0
	16	21.1	16.1	4.9	20.7	16.0	5.3	20.3	15.9	5.7	19.9	15.8	6.1	19.4	15.6	6.6	18.9	15.4	7.0
	17	21.8	14.7	4.9	21.4	14.6	5.3	21.0	14.4	5.7	20.6	14.2	6.1	20.1	14.0	6.6	19.6	13.8	7.1
23	15	20.3	19.2	4.9	20.0	18.9	5.3	19.6	18.5	5.7	19.2	18.1	6.1	18.7	17.6	6.5	18.2	17.2	7.0
	16	20.9	18.8	4.9	20.5	18.8	5.3	20.1	18.7	5.7	19.7	18.6	6.1	19.3	18.2	6.5	18.8	17.7	7.0
	17	21.6	17.7	4.9	21.2	17.6	5.3	20.8	17.5	5.7	20.4	17.4	6.1	19.9	17.3	6.6	19.4	17.0	7.0
	18	22.3	16.4	4.9	21.9	16.3	5.3	21.5	16.2	5.7	21.0	16.0	6.1	20.5	15.8	6.6	20.0	15.6	7.1
27	18	22.2	21.2	4.9	21.8	20.8	5.3	21.4	20.3	5.7	20.9	19.9	6.1	20.5	19.4	6.6	19.9	18.8	7.1
	19	22.9	20.6	4.9	22.5	20.6	5.3	22.0	20.6	5.7	21.5	20.5	6.1	21.0	20.0	6.6	20.5	19.4	7.1
	20	23.5	19.5	4.9	23.1	19.5	5.3	22.6	19.4	5.7	22.1	19.3	6.1	21.6	19.1	6.6	21.0	18.9	7.1
	22	24.9	16.9	4.8	24.4	16.8	5.2	23.9	16.6	5.7	23.4	16.4	6.2	22.8	16.2	6.6	22.2	15.9	7.2
31	21	24.4	23.3	4.8	24.0	22.9	5.3	23.5	22.4	5.7	23.0	21.9	6.2	22.4	21.3	6.6	21.8	20.7	7.1
	22	25.0	22.5	4.8	24.5	22.5	5.2	24.0	22.4	5.7	23.5	22.3	6.2	22.9	21.8	6.7	22.3	21.2	7.2
	23	25.6	21.4	4.8	25.1	21.3	5.2	24.6	21.3	5.7	24.0	21.1	6.2	23.4	21.0	6.7	22.8	20.7	7.2
	25	26.9	18.8	4.8	26.4	18.7	5.2	25.8	18.6	5.7	25.2	18.4	6.2	24.6	18.2	6.7	23.9	17.9	7.2



# Performance Data at part load

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

Nominal Air Flow: **1800 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 350 at Minimum Capacity / Nominal less 50% (1800 l/s)

Indoor coil  
 E.A.T.

Outdoor coil Entering Air Temperature °C DB

D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	16.5	15.2	4.1	16.2	15.1	4.4	15.9	14.8	4.7	15.6	14.5	5.0	15.2	14.1	5.4	14.8	13.7	5.8
	15	17.0	14.3	4.1	16.7	14.3	4.4	16.4	14.3	4.7	16.1	14.2	5.1	15.7	14.1	5.4	15.3	13.9	5.8
	16	17.6	13.3	4.1	17.3	13.2	4.4	17.0	13.1	4.7	16.6	13.0	5.1	16.2	12.9	5.4	15.8	12.7	5.8
	17	18.2	12.1	4.0	17.9	12.0	4.4	17.6	11.9	4.7	17.2	11.7	5.1	16.8	11.5	5.4	16.3	11.3	5.8
23	15	17.0	15.9	4.1	16.7	15.6	4.4	16.3	15.3	4.7	16.0	14.9	5.1	15.6	14.6	5.4	15.2	14.2	5.8
	16	17.5	15.5	4.1	17.2	15.5	4.4	16.8	15.5	4.7	16.5	15.4	5.1	16.1	15.0	5.4	15.7	14.6	5.8
	17	18.1	14.6	4.1	17.7	14.5	4.4	17.4	14.5	4.7	17.0	14.4	5.1	16.6	14.2	5.4	16.2	14.1	5.8
	18	18.7	13.5	4.0	18.3	13.4	4.4	18.0	13.3	4.7	17.6	13.2	5.1	17.2	13.1	5.4	16.7	12.9	5.8
27	18	18.6	17.5	4.0	18.3	17.2	4.4	17.9	16.8	4.7	17.5	16.4	5.1	17.1	16.0	5.4	16.6	15.6	5.8
	19	19.1	17.0	4.0	18.8	17.0	4.4	18.4	17.0	4.7	18.0	16.9	5.1	17.6	16.5	5.4	17.1	16.0	5.8
	20	19.7	16.1	4.0	19.3	16.1	4.3	18.9	16.1	4.7	18.5	15.9	5.1	18.1	15.8	5.4	17.6	15.6	5.8
	22	20.8	13.9	3.9	20.4	13.9	4.3	20.0	13.7	4.7	19.6	13.6	5.0	19.1	13.4	5.4	18.5	13.1	5.9
31	21	20.4	19.4	4.0	20.1	19.0	4.3	19.7	18.6	4.7	19.2	18.1	5.1	18.7	17.7	5.4	18.2	17.1	5.9
	22	20.9	18.6	3.9	20.5	18.6	4.3	20.1	18.6	4.7	19.7	18.5	5.0	19.2	18.1	5.4	18.6	17.6	5.9
	23	21.4	17.7	3.9	21.0	17.7	4.3	20.6	17.6	4.6	20.1	17.5	5.0	19.6	17.4	5.4	19.0	17.1	5.9
	25	22.5	15.6	3.8	22.1	15.5	4.2	21.6	15.4	4.6	21.1	15.3	5.0	20.6	15.1	5.4	20.0	14.8	5.9

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

○ = Nominal Capacity (kW)  
 Nominal Air Flow: **2200 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 450 at Maximum Capacity (2200 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																	
E.A.T.		23			27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	48.3	34.7	16.6	47.2	34.8	17.7	46.1	34.7	18.8	44.9	34.6	20.0	43.6	34.4	21.3	42.3	34.1	22.6
	15	50.0	31.7	16.7	48.9	31.7	17.8	47.7	31.6	19.0	46.5	31.4	20.2	45.2	31.2	21.5	43.8	30.8	22.9
	16	51.8	28.3	16.9	50.7	28.2	18.0	49.4	28.0	19.2	48.2	27.8	20.4	46.8	27.5	21.7	45.4	27.1	23.1
	17	53.7	24.3	17.0	52.5	24.2	18.2	51.2	23.9	19.4	49.9	23.7	20.6	48.5	23.3	21.9	47.0	22.9	23.3
23	15	49.8	37.7	16.7	48.7	37.8	17.8	47.5	37.8	19.0	46.3	37.7	20.2	45.0	37.5	21.5	43.6	37.2	22.8
	16	51.3	34.9	16.8	50.2	34.9	18.0	48.9	34.9	19.1	47.7	34.7	20.4	46.3	34.5	21.7	44.9	34.1	23.0
	17	53.1	31.8	17.0	52.0	31.8	18.1	50.7	31.7	19.3	49.4	31.5	20.6	48.0	31.2	21.9	46.5	30.8	23.3
	18	55.0	28.3	17.1	53.8	28.2	18.3	52.5	28.0	19.5	51.1	27.8	20.8	49.7	27.4	22.1	48.1	27.1	23.5
27	18	54.8	41.1	17.1	53.5	41.2	18.3	52.2	41.2	19.5	50.8	41.1	20.7	49.4	40.9	22.1	47.9	40.6	23.5
	19	56.4	38.4	17.3	55.1	38.5	18.4	53.8	38.4	19.6	52.4	38.3	20.9	50.9	38.1	22.3	49.3	37.7	23.7
	20	58.1	35.4	17.4	56.8	35.4	18.6	55.4	35.3	19.8	53.9	35.1	21.1	52.4	34.9	22.5	50.8	34.5	23.9
	22	61.5	28.1	17.6	60.1	28.0	18.8	58.7	27.8	20.1	57.1	27.5	21.4	55.5	27.2	22.8	53.8	26.8	24.3
31	21	60.4	44.7	17.5	59.0	44.8	18.7	57.5	44.9	20.0	56.0	44.8	21.3	54.4	44.6	22.7	52.8	44.3	24.2
	22	61.8	42.0	17.6	60.4	42.1	18.9	58.9	42.1	20.1	57.4	41.9	21.5	55.7	41.7	22.9	54.0	41.4	24.3
	23	63.3	38.9	17.8	61.9	39.0	19.0	60.3	38.9	20.3	58.7	38.8	21.6	57.1	38.5	23.0	55.3	38.1	24.5
	25	66.7	32.0	18.0	65.1	31.9	19.2	63.5	31.7	20.5	61.8	31.5	21.9	60.1	31.2	23.4	58.2	30.8	24.9

### OPA 450 at Nominal Capacity (2200 l/s)

Indoor coil		Outdoor coil Entering Air Temperature °C DB																	
E.A.T.		23			27			31			35			39			43		
D.B. °C	W.B. °C	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	41.4	31.9	11.5	40.6	32.0	12.3	39.7	32.0	13.1	38.7	31.9	14.0	37.7	31.7	15.0	36.6	31.4	16.0
	15	42.9	29.4	11.5	42.0	29.4	12.3	41.1	29.3	13.2	40.1	29.1	14.1	39.0	28.9	15.1	37.9	28.6	16.1
	16	44.4	26.5	11.6	43.5	26.4	12.4	42.5	26.3	13.3	41.4	26.1	14.3	40.4	25.8	15.2	39.2	25.5	16.3
	17	45.9	23.2	11.7	44.9	23.0	12.5	43.9	22.8	13.4	42.9	22.6	14.4	41.7	22.2	15.4	40.5	21.9	16.4
23	15	42.7	34.6	11.5	41.8	34.6	12.3	40.8	34.6	13.2	39.9	34.6	14.1	38.8	34.4	15.1	37.7	34.1	16.1
	16	43.9	32.1	11.6	43.0	32.2	12.4	42.1	32.1	13.3	41.0	32.0	14.2	40.0	31.8	15.2	38.8	31.5	16.2
	17	45.5	29.6	11.6	44.5	29.5	12.5	43.5	29.4	13.4	42.5	29.3	14.3	41.3	29.0	15.3	40.2	28.7	16.4
	18	47.0	26.6	11.7	46.0	26.5	12.6	45.0	26.3	13.5	43.9	26.1	14.4	42.7	25.8	15.4	41.5	25.5	16.5
27	18	46.8	37.5	11.7	45.8	37.6	12.6	44.8	37.7	13.5	43.7	37.6	14.4	42.5	37.4	15.4	41.3	37.1	16.5
	19	48.2	35.3	11.7	47.1	35.4	12.6	46.1	35.3	13.5	44.9	35.2	14.5	43.7	35.0	15.5	42.5	34.7	16.6
	20	49.6	32.8	11.8	48.5	32.8	12.7	47.4	32.7	13.6	46.2	32.5	14.6	45.0	32.3	15.6	43.7	32.0	16.7
	22	52.4	26.7	11.9	51.3	26.6	12.8	50.1	26.4	13.8	48.9	26.1	14.8	47.5	25.8	15.8	46.2	25.4	17.0
31	21	51.4	40.8	11.9	50.3	40.9	12.8	49.2	40.9	13.7	48.0	40.9	14.7	46.7	40.7	15.8	45.3	40.4	16.9
	22	52.6	38.5	11.9	51.5	38.6	12.8	50.3	38.6	13.8	49.1	38.4	14.8	47.8	38.2	15.9	46.4	37.9	17.0
	23	53.9	35.9	12.0	52.7	36.0	12.9	51.5	35.9	13.9	50.2	35.8	14.9	48.9	35.5	15.9	47.4	35.2	17.1
	25	56.6	30.1	12.0	55.4	30.0	13.0	54.1	29.9	14.0	52.8	29.6	15.0	51.3	29.3	16.1	49.8	28.9	17.3

# Performance Data at part load

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
SC = Sensible Capacity (kW).  
PI = Power Input (kW)  
E.A.T. = Entering Air Temperature .

Nominal Air Flow: **2200 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 450 at Nominal less 10% (2200 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	37.2	29.9	9.9	36.5	29.9	10.6	35.7	29.9	11.3	34.9	29.8	12.1	34.0	29.6	12.9	33.1	29.4	13.7
	15	38.5	27.7	9.9	37.8	27.6	10.6	36.9	27.5	11.4	36.1	27.4	12.1	35.1	27.2	13.0	34.2	26.9	13.8
	16	39.9	25.1	10.0	39.1	25.0	10.7	38.2	24.9	11.4	37.3	24.7	12.2	36.3	24.4	13.1	35.3	24.1	13.9
	17	41.2	22.2	10.0	40.4	22.0	10.8	39.5	21.8	11.5	38.6	21.5	12.3	37.6	21.2	13.2	36.5	20.9	14.0
23	15	38.4	32.3	9.9	37.6	32.4	10.6	36.8	32.4	11.4	35.9	32.3	12.1	35.0	32.1	12.9	34.0	31.9	13.8
	16	39.5	30.2	10.0	38.7	30.2	10.7	37.8	30.1	11.4	36.9	30.0	12.2	36.0	29.8	13.0	35.0	29.5	13.9
	17	40.8	27.9	10.0	40.0	27.8	10.7	39.1	27.7	11.5	38.2	27.6	12.3	37.2	27.3	13.1	36.2	27.0	14.0
	18	42.2	25.3	10.1	41.4	25.2	10.8	40.5	25.0	11.6	39.5	24.8	12.4	38.5	24.5	13.2	37.4	24.2	14.1
27	18	42.0	35.1	10.1	41.2	35.2	10.8	40.3	35.2	11.6	39.3	35.1	12.4	38.3	34.9	13.2	37.2	34.7	14.1
	19	43.2	33.1	10.1	42.4	33.1	10.8	41.4	33.1	11.6	40.4	33.0	12.4	39.4	32.8	13.3	38.3	32.5	14.2
	20	44.5	30.9	10.1	43.6	30.8	10.9	42.6	30.8	11.7	41.6	30.6	12.5	40.5	30.4	13.4	39.3	30.0	14.3
	22	47.0	25.5	10.2	46.0	25.4	11.0	45.0	25.2	11.8	43.9	24.9	12.7	42.8	24.6	13.5	41.6	24.2	14.5
31	21	46.2	38.1	10.2	45.2	38.2	11.0	44.2	38.2	11.8	43.1	38.1	12.6	42.0	38.0	13.5	40.8	37.7	14.4
	22	47.2	36.1	10.2	46.2	36.1	11.0	45.2	36.1	11.8	44.1	36.0	12.7	43.0	35.8	13.6	41.7	35.5	14.5
	23	48.3	33.8	10.2	47.3	33.8	11.0	46.2	33.8	11.9	45.1	33.6	12.7	43.9	33.4	13.6	42.7	33.1	14.6
	25	50.8	28.7	10.3	49.7	28.6	11.1	48.6	28.4	12.0	47.4	28.2	12.8	46.1	27.9	13.8	44.8	27.5	14.7

### OPA 450 at Nominal less 20% (2200 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	33.1	27.9	8.3	32.4	27.9	8.9	31.7	27.8	9.6	31.0	27.7	10.2	30.2	27.5	11.0	29.4	27.3	11.7
	15	34.2	25.9	8.3	33.5	25.9	8.9	32.8	25.8	9.6	32.1	25.6	10.3	31.3	25.4	11.0	30.4	25.1	11.8
	16	35.4	23.7	8.3	34.7	23.6	9.0	33.9	23.4	9.7	33.2	23.2	10.4	32.3	23.0	11.1	31.4	22.7	11.9
	17	36.6	21.1	8.4	35.9	21.0	9.0	35.1	20.8	9.7	34.3	20.5	10.4	33.4	20.2	11.2	32.5	19.9	12.0
23	15	34.0	30.0	8.3	33.4	30.1	8.9	32.7	30.0	9.6	31.9	30.0	10.3	31.1	29.5	11.0	30.3	28.7	11.8
	16	35.0	28.2	8.3	34.3	28.2	9.0	33.6	28.1	9.6	32.8	28.0	10.3	32.0	27.8	11.1	31.1	27.5	11.9
	17	36.2	26.2	8.4	35.5	26.1	9.0	34.8	26.0	9.7	33.9	25.8	10.4	33.1	25.6	11.1	32.2	25.3	11.9
	18	37.5	23.9	8.4	36.7	23.8	9.0	35.9	23.6	9.7	35.1	23.4	10.5	34.2	23.1	11.2	33.2	22.8	12.0
27	18	37.3	32.6	8.4	36.5	32.7	9.0	35.8	32.7	9.7	34.9	32.6	10.4	34.0	32.4	11.2	33.1	31.5	12.0
	19	38.3	30.9	8.4	37.6	30.9	9.1	36.8	30.9	9.8	35.9	30.7	10.5	35.0	30.5	11.3	34.0	30.2	12.1
	20	39.4	29.0	8.4	38.6	28.9	9.1	37.8	28.8	9.8	36.9	28.7	10.5	36.0	28.4	11.3	34.9	28.1	12.1
	22	41.7	24.3	8.4	40.8	24.2	9.1	39.9	23.9	9.8	39.0	23.7	10.6	38.0	23.4	11.4	36.9	23.0	12.3
31	21	40.9	35.4	8.4	40.1	35.5	9.1	39.2	35.5	9.8	38.3	35.4	10.6	37.3	35.2	11.4	36.2	34.6	12.2
	22	41.9	33.7	8.4	41.0	33.7	9.1	40.1	33.7	9.9	39.2	33.5	10.6	38.1	33.3	11.4	37.0	33.0	12.3
	23	42.8	31.7	8.4	42.0	31.7	9.1	41.0	31.6	9.9	40.1	31.5	10.7	39.0	31.2	11.5	37.9	30.9	12.3
	25	45.0	27.3	8.4	44.1	27.2	9.2	43.1	27.0	9.9	42.1	26.7	10.7	40.9	26.4	11.6	39.8	26.0	12.4

# Performance Data at part load

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
SC = Sensible Capacity (kW).  
PI = Power Input (kW)  
E.A.T. = Entering Air Temperature .

Nominal Air Flow: **2200 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 450 at Nominal less 30% (2200 l/s)

Indoor coil  
E.A.T.

Outdoor coil Entering Air Temperature °C DB

D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	28.9	25.0	7.0	28.3	25.0	7.6	27.7	25.0	8.2	27.1	24.8	8.8	26.4	24.7	9.4	25.7	24.2	10.1
	15	29.8	23.3	7.0	29.3	23.3	7.6	28.7	23.2	8.2	28.0	23.0	8.8	27.3	22.8	9.5	26.6	22.6	10.1
	16	30.9	21.4	7.0	30.3	21.3	7.6	29.6	21.2	8.2	29.0	21.0	8.8	28.2	20.7	9.5	27.5	20.4	10.2
	17	31.9	19.2	7.0	31.3	19.0	7.6	30.6	18.8	8.2	29.9	18.6	8.9	29.2	18.3	9.5	28.4	18.0	10.3
23	15	29.7	26.9	7.0	29.1	26.9	7.6	28.5	26.9	8.2	27.9	26.3	8.8	27.2	25.6	9.4	26.5	24.9	10.1
	16	30.6	25.3	7.0	30.0	25.3	7.6	29.4	25.2	8.2	28.7	25.1	8.8	28.0	24.9	9.5	27.2	24.6	10.2
	17	31.6	23.6	7.0	31.0	23.5	7.6	30.4	23.4	8.2	29.7	23.3	8.9	28.9	23.0	9.5	28.1	22.7	10.2
	18	32.7	21.6	7.0	32.0	21.5	7.6	31.4	21.4	8.2	30.6	21.2	8.9	29.9	20.9	9.6	29.0	20.6	10.3
27	18	32.5	29.2	7.0	31.9	29.3	7.6	31.2	29.3	8.2	30.5	28.9	8.9	29.7	28.1	9.6	28.9	27.3	10.3
	19	33.5	27.8	7.0	32.8	27.8	7.6	32.1	27.7	8.2	31.4	27.6	8.9	30.6	27.4	9.6	29.7	27.1	10.3
	20	34.4	26.1	7.0	33.7	26.1	7.6	33.0	26.0	8.3	32.2	25.8	8.9	31.4	25.5	9.6	30.5	25.2	10.4
	22	36.4	22.1	7.0	35.6	22.0	7.6	34.9	21.8	8.3	34.0	21.5	9.0	33.1	21.2	9.7	32.2	20.8	10.5
31	21	35.7	31.8	7.0	35.0	31.8	7.6	34.2	31.8	8.3	33.4	31.7	9.0	32.6	31.0	9.7	31.6	30.0	10.4
	22	36.5	30.3	7.0	35.8	30.3	7.6	35.0	30.2	8.3	34.2	30.1	9.0	33.3	29.9	9.7	32.3	29.6	10.5
	23	37.4	28.6	7.0	36.6	28.6	7.6	35.8	28.5	8.3	35.0	28.3	9.0	34.0	28.1	9.7	33.0	27.7	10.5
	25	39.3	24.8	6.9	38.5	24.7	7.6	37.6	24.5	8.3	36.7	24.2	9.0	35.7	23.9	9.8	34.7	23.5	10.6

### OPA 450 at Nominal less 40% (2200 l/s)

Indoor coil  
E.A.T.

Outdoor coil Entering Air Temperature °C DB

D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	24.7	22.4	5.8	24.3	22.4	6.2	23.8	22.2	6.7	23.3	21.7	7.2	22.7	21.2	7.7	22.1	20.6	8.2
	15	25.6	21.0	5.8	25.1	21.0	6.2	24.6	20.9	6.7	24.1	20.8	7.2	23.5	20.6	7.7	22.9	20.3	8.3
	16	26.4	19.4	5.8	26.0	19.3	6.2	25.4	19.2	6.7	24.9	19.0	7.2	24.3	18.8	7.7	23.6	18.5	8.3
	17	27.3	17.6	5.8	26.8	17.4	6.2	26.3	17.3	6.7	25.7	17.0	7.2	25.1	16.8	7.8	24.4	16.5	8.3
23	15	25.5	23.9	5.8	25.0	23.4	6.2	24.5	22.9	6.7	24.0	22.4	7.2	23.4	21.8	7.7	22.8	21.2	8.2
	16	26.2	22.7	5.8	25.7	22.7	6.2	25.2	22.7	6.7	24.6	22.6	7.2	24.0	22.4	7.7	23.4	21.8	8.3
	17	27.1	21.3	5.8	26.6	21.3	6.2	26.0	21.2	6.7	25.5	21.0	7.2	24.8	20.8	7.8	24.2	20.5	8.3
	18	28.0	19.7	5.8	27.4	19.6	6.2	26.9	19.4	6.7	26.3	19.2	7.2	25.6	19.0	7.8	24.9	18.7	8.3
27	18	27.8	26.2	5.8	27.3	25.7	6.2	26.8	25.2	6.7	26.2	24.6	7.2	25.5	23.9	7.8	24.8	23.3	8.3
	19	28.6	25.0	5.7	28.1	25.0	6.2	27.5	24.9	6.7	26.9	24.8	7.2	26.2	24.6	7.8	25.5	23.9	8.4
	20	29.4	23.6	5.7	28.9	23.5	6.2	28.3	23.4	6.7	27.6	23.3	7.3	26.9	23.0	7.8	26.2	22.8	8.4
	22	31.1	20.2	5.7	30.5	20.1	6.2	29.9	19.9	6.7	29.2	19.7	7.3	28.4	19.4	7.8	27.6	19.0	8.4
31	21	30.5	28.5	5.7	29.9	28.4	6.2	29.3	27.7	6.7	28.6	27.1	7.3	27.9	26.3	7.8	27.2	25.6	8.4
	22	31.2	27.2	5.7	30.6	27.2	6.2	30.0	27.2	6.7	29.3	27.0	7.3	28.6	26.8	7.8	27.8	26.2	8.4
	23	31.9	25.8	5.7	31.3	25.8	6.2	30.7	25.7	6.7	30.0	25.5	7.3	29.2	25.3	7.9	28.4	25.0	8.5
	25	33.5	22.6	5.6	32.9	22.5	6.1	32.2	22.3	6.7	31.4	22.1	7.3	30.6	21.8	7.9	29.8	21.4	8.5

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

Nominal Air Flow: **2200 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 450 at Nominal less 50% (2200 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	20.6	18.8	4.8	20.2	18.7	5.2	19.8	18.3	5.6	19.4	17.8	5.9	18.9	17.4	6.3	18.4	16.9	6.8
	15	21.3	17.7	4.8	20.9	17.7	5.2	20.5	17.6	5.6	20.1	17.5	5.9	19.6	17.3	6.4	19.1	17.1	6.8
	16	22.0	16.4	4.8	21.6	16.3	5.2	21.2	16.2	5.5	20.7	16.0	6.0	20.2	15.8	6.4	19.7	15.6	6.8
	17	22.8	14.8	4.8	22.4	14.7	5.1	21.9	14.6	5.5	21.4	14.4	6.0	20.9	14.1	6.4	20.3	13.9	6.8
23	15	21.2	19.6	4.8	20.8	19.3	5.2	20.4	18.8	5.6	20.0	18.4	5.9	19.5	17.9	6.4	19.0	17.4	6.8
	16	21.8	19.1	4.8	21.4	19.1	5.2	21.0	19.1	5.5	20.5	19.0	5.9	20.0	18.5	6.4	19.5	17.9	6.8
	17	22.6	18.0	4.8	22.2	17.9	5.2	21.7	17.8	5.5	21.2	17.7	6.0	20.7	17.5	6.4	20.1	17.2	6.8
	18	23.3	16.6	4.7	22.9	16.5	5.1	22.4	16.4	5.5	21.9	16.2	5.9	21.4	16.0	6.4	20.8	15.7	6.8
27	18	23.2	21.6	4.7	22.8	21.2	5.1	22.3	20.8	5.5	21.8	20.2	5.9	21.3	19.7	6.4	20.7	19.1	6.8
	19	23.9	21.0	4.7	23.4	21.0	5.1	23.0	21.0	5.5	22.4	20.9	5.9	21.9	20.3	6.4	21.3	19.7	6.9
	20	24.6	19.9	4.7	24.1	19.9	5.1	23.6	19.8	5.5	23.1	19.6	5.9	22.5	19.4	6.4	21.8	19.1	6.9
	22	26.0	17.2	4.6	25.5	17.0	5.0	24.9	16.9	5.5	24.4	16.6	5.9	23.7	16.4	6.4	23.0	16.1	6.9
31	21	25.5	23.9	4.6	25.0	23.4	5.1	24.5	22.9	5.5	23.9	22.3	5.9	23.3	21.7	6.4	22.6	21.0	6.9
	22	26.1	23.0	4.6	25.6	23.0	5.0	25.1	22.9	5.5	24.5	22.8	5.9	23.8	22.3	6.4	23.1	21.6	6.9
	23	26.7	21.9	4.6	26.2	21.8	5.0	25.6	21.7	5.5	25.0	21.6	5.9	24.4	21.3	6.4	23.7	21.0	6.9
	25	28.1	19.2	4.5	27.5	19.1	5.0	26.9	19.0	5.4	26.3	18.7	5.9	25.6	18.5	6.4	24.8	18.1	6.9

### OPA 450 at Minimum Capacity (2200 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	16.7	15.0	4.4	16.4	14.8	4.8	16.1	14.5	5.1	15.7	14.2	5.5	15.4	13.8	5.8	15.0	13.4	6.2
	15	17.2	14.0	4.4	16.9	14.0	4.7	16.6	14.0	5.1	16.2	13.9	5.5	15.9	13.7	5.8	15.4	13.6	6.2
	16	17.8	13.0	4.4	17.5	12.9	4.7	17.2	12.8	5.1	16.8	12.7	5.4	16.4	12.6	5.8	15.9	12.4	6.2
	17	18.4	11.7	4.3	18.1	11.7	4.7	17.7	11.5	5.1	17.3	11.4	5.4	16.9	11.2	5.8	16.5	11.0	6.2
23	15	17.1	15.6	4.4	16.8	15.3	4.7	16.5	15.0	5.1	16.2	14.6	5.5	15.8	14.3	5.8	15.4	13.8	6.2
	16	17.6	15.2	4.4	17.3	15.2	4.7	17.0	15.2	5.1	16.6	15.1	5.4	16.2	14.7	5.8	15.8	14.3	6.2
	17	18.2	14.3	4.4	17.9	14.2	4.7	17.6	14.2	5.1	17.2	14.1	5.4	16.8	13.9	5.8	16.3	13.7	6.2
	18	18.8	13.2	4.3	18.5	13.1	4.7	18.1	13.0	5.1	17.7	12.9	5.4	17.3	12.7	5.8	16.8	12.5	6.3
27	18	18.8	17.2	4.3	18.4	16.9	4.7	18.1	16.5	5.1	17.7	16.1	5.4	17.2	15.7	5.8	16.8	15.2	6.3
	19	19.3	16.7	4.3	18.9	16.7	4.7	18.6	16.7	5.0	18.2	16.6	5.4	17.7	16.2	5.8	17.2	15.7	6.3
	20	19.8	15.8	4.3	19.5	15.8	4.6	19.1	15.7	5.0	18.7	15.6	5.4	18.2	15.5	5.8	17.7	15.3	6.3
	22	21.0	13.6	4.2	20.6	13.5	4.6	20.2	13.4	5.0	19.7	13.2	5.4	19.2	13.0	5.8	18.7	12.8	6.3
31	21	20.6	19.1	4.2	20.2	18.7	4.6	19.8	18.3	5.0	19.3	17.8	5.4	18.9	17.3	5.8	18.3	16.8	6.3
	22	21.1	18.3	4.2	20.7	18.3	4.6	20.3	18.3	5.0	19.8	18.2	5.4	19.3	17.8	5.8	18.7	17.2	6.3
	23	21.6	17.4	4.1	21.2	17.4	4.5	20.7	17.3	5.0	20.2	17.2	5.4	19.7	17.0	5.8	19.2	16.8	6.3
	25	22.7	15.3	4.1	22.2	15.2	4.5	21.8	15.1	4.9	21.3	14.9	5.3	20.7	14.7	5.8	20.1	14.4	6.3

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

○ = Nominal Capacity (kW)  
 Nominal Air Flow: **2600 l/s**

**Note:** Total Capacity figures are gross and do not include allowance for fan motor heat loss.

### OPA 560 at Maximum Capacity (2600 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	59.5	41.6	20.4	58.2	41.7	21.7	56.8	41.7	23.0	55.4	41.6	24.4	53.9	41.4	25.9	52.3	41.1	27.4
	15	61.7	37.9	20.6	60.3	37.9	21.9	58.9	37.8	23.2	57.4	37.7	24.6	55.9	37.4	26.1	54.2	37.1	27.7
	16	63.9	33.6	20.8	62.5	33.5	22.1	61.1	33.4	23.4	59.5	33.2	24.9	57.9	32.8	26.4	56.2	32.5	28.0
	17	66.2	28.7	21.0	64.8	28.5	22.3	63.2	28.3	23.6	61.6	28.0	25.1	59.9	27.7	26.6	58.2	27.2	28.2
23	15	61.4	45.3	20.6	60.0	45.5	21.8	58.6	45.5	23.2	57.1	45.5	24.6	55.6	45.3	26.1	54.0	45.0	27.6
	16	63.3	41.7	20.7	61.9	41.8	22.0	60.4	41.8	23.4	58.9	41.7	24.8	57.3	41.5	26.3	55.6	41.1	27.9
	17	65.6	37.9	20.9	64.1	37.9	22.2	62.6	37.8	23.6	61.0	37.7	25.0	59.3	37.4	26.6	57.6	37.0	28.2
	18	67.9	33.5	21.1	66.4	33.5	22.4	64.8	33.3	23.8	63.2	33.0	25.3	61.4	32.7	26.8	59.6	32.3	28.4
27	18	67.6	49.3	21.1	66.1	49.5	22.4	64.5	49.6	23.8	62.9	49.6	25.2	61.1	49.4	26.8	59.3	49.1	28.4
	19	69.6	46.0	21.2	68.1	46.2	22.5	66.5	46.2	23.9	64.8	46.1	25.4	63.0	45.9	27.0	61.1	45.5	28.6
	20	71.7	42.3	21.3	70.1	42.3	22.7	68.4	42.3	24.1	66.7	42.1	25.6	64.8	41.9	27.2	62.9	41.5	28.9
	22	76.0	33.3	21.6	74.3	33.1	23.0	72.5	32.9	24.5	70.6	32.7	26.0	68.7	32.3	27.6	66.6	31.9	29.3
31	21	74.6	53.7	21.5	72.9	53.9	22.9	71.1	54.1	24.4	69.3	54.0	25.9	67.4	53.9	27.5	65.4	53.5	29.2
	22	76.4	50.3	21.6	74.7	50.5	23.0	72.9	50.6	24.5	71.0	50.5	26.1	69.0	50.3	27.7	66.9	49.9	29.4
	23	78.2	46.5	21.8	76.5	46.6	23.2	74.6	46.6	24.7	72.7	46.5	26.2	70.7	46.3	27.9	68.5	45.9	29.6
	25	82.4	37.9	22.0	80.5	37.8	23.5	78.6	37.7	25.0	76.5	37.5	26.6	74.4	37.1	28.3	72.2	36.7	30.0

### OPA 560 at Nominal Capacity (2600 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	51.2	38.6	14.2	50.2	38.7	15.2	49.1	38.7	16.2	48.0	38.6	17.3	46.8	38.4	18.5	45.5	38.2	19.8
	15	53.0	35.4	14.3	52.0	35.4	15.3	50.8	35.4	16.3	49.6	35.2	17.5	48.4	35.0	18.7	47.1	34.7	19.9
	16	54.9	31.8	14.3	53.7	31.7	15.4	52.6	31.6	16.5	51.3	31.4	17.6	50.0	31.1	18.8	48.7	30.7	20.1
	17	56.7	27.7	14.4	55.6	27.5	15.5	54.4	27.3	16.6	53.1	27.0	17.7	51.7	26.7	19.0	50.3	26.3	20.3
23	15	52.8	41.8	14.2	51.7	41.9	15.3	50.6	42.0	16.3	49.4	41.9	17.5	48.1	41.8	18.6	46.8	41.5	19.9
	16	54.3	38.8	14.3	53.2	38.8	15.3	52.1	38.8	16.4	50.8	38.7	17.6	49.6	38.5	18.8	48.2	38.2	20.0
	17	56.2	35.5	14.4	55.1	35.5	15.4	53.9	35.5	16.5	52.6	35.3	17.7	51.2	35.0	18.9	49.8	34.7	20.2
	18	58.1	31.9	14.4	56.9	31.8	15.5	55.7	31.6	16.6	54.3	31.4	17.8	53.0	31.1	19.1	51.5	30.7	20.4
27	18	57.8	45.4	14.4	56.7	45.5	15.5	55.4	45.6	16.6	54.1	45.6	17.8	52.7	45.4	19.0	51.2	45.1	20.3
	19	59.5	42.6	14.5	58.3	42.7	15.6	57.0	42.7	16.7	55.6	42.6	17.9	54.2	42.4	19.2	52.7	42.1	20.5
	20	61.2	39.4	14.6	59.9	39.4	15.6	58.6	39.4	16.8	57.2	39.2	18.0	55.7	39.0	19.3	54.2	38.7	20.6
	22	64.7	31.9	14.7	63.4	31.7	15.8	61.9	31.5	17.0	60.5	31.2	18.2	58.9	30.9	19.5	57.2	30.5	20.9
31	21	63.5	49.2	14.6	62.2	49.4	15.7	60.8	49.5	16.9	59.4	49.5	18.1	57.8	49.4	19.4	56.2	49.1	20.8
	22	65.0	46.4	14.7	63.7	46.5	15.8	62.2	46.6	17.0	60.7	46.5	18.2	59.2	46.3	19.5	57.5	46.0	20.9
	23	66.5	43.2	14.7	65.1	43.3	15.9	63.7	43.3	17.1	62.1	43.2	18.3	60.5	42.9	19.6	58.8	42.6	21.0
	25	69.9	36.0	14.8	68.4	35.9	16.0	66.9	35.7	17.2	65.3	35.5	18.5	63.5	35.2	19.9	61.7	34.8	21.3



# Performance Data at part load

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
SC = Sensible Capacity (kW).  
PI = Power Input (kW)  
E.A.T. = Entering Air Temperature .

Nominal Air Flow: **2600 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 560 at Nominal less 10% (2600 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	46.1	35.9	12.1	45.2	35.9	13.0	44.2	35.9	13.9	43.2	35.8	14.8	42.1	35.6	15.8	40.9	35.3	16.9
	15	47.7	33.1	12.2	46.8	33.1	13.1	45.7	33.0	14.0	44.7	32.8	14.9	43.5	32.6	15.9	42.3	32.2	17.0
	16	49.4	29.9	12.2	48.4	29.8	13.1	47.3	29.6	14.1	46.2	29.4	15.0	45.0	29.1	16.1	43.8	28.7	17.1
	17	51.1	26.2	12.3	50.0	26.0	13.2	48.9	25.8	14.1	47.8	25.5	15.1	46.5	25.1	16.2	45.2	24.7	17.3
23	15	47.5	38.8	12.2	46.5	38.9	13.0	45.5	38.9	14.0	44.4	38.9	14.9	43.3	38.7	15.9	42.1	38.4	17.0
	16	48.9	36.1	12.2	47.9	36.2	13.1	46.9	36.1	14.0	45.7	36.0	15.0	44.6	35.8	16.0	43.3	35.5	17.1
	17	50.6	33.3	12.3	49.5	33.3	13.2	48.5	33.1	14.1	47.3	33.0	15.1	46.1	32.7	16.1	44.8	32.3	17.2
	18	52.3	30.0	12.3	51.2	29.9	13.2	50.1	29.7	14.2	48.9	29.5	15.2	47.6	29.2	16.2	46.3	28.8	17.4
27	18	52.0	42.2	12.3	51.0	42.3	13.2	49.9	42.3	14.2	48.7	42.2	15.2	47.4	42.1	16.2	46.1	41.8	17.3
	19	53.6	39.7	12.4	52.5	39.8	13.3	51.3	39.7	14.2	50.1	39.6	15.3	48.7	39.4	16.3	47.4	39.0	17.5
	20	55.1	36.9	12.4	54.0	36.9	13.3	52.7	36.8	14.3	51.5	36.6	15.3	50.1	36.4	16.4	48.7	36.0	17.6
	22	58.2	30.2	12.5	57.0	30.0	13.4	55.7	29.8	14.4	54.4	29.5	15.5	53.0	29.2	16.6	51.4	28.7	17.8
31	21	57.2	45.8	12.4	56.0	46.0	13.4	54.7	46.0	14.4	53.4	45.9	15.4	52.0	45.7	16.5	50.5	45.4	17.7
	22	58.5	43.3	12.5	57.3	43.4	13.4	56.0	43.4	14.4	54.6	43.3	15.5	53.2	43.0	16.6	51.7	42.7	17.8
	23	59.9	40.5	12.5	58.6	40.5	13.5	57.3	40.4	14.5	55.9	40.3	15.6	54.4	40.0	16.7	52.8	39.6	17.9
	25	62.9	34.1	12.5	61.6	33.9	13.6	60.2	33.8	14.6	58.7	33.5	15.7	57.1	33.1	16.9	55.5	32.7	18.1

### OPA 560 at Nominal less 20% (2600 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	40.9	33.3	10.1	40.1	33.3	10.8	39.3	33.3	11.6	38.4	33.2	12.4	37.5	33.0	13.2	36.5	32.7	14.1
	15	42.3	30.8	10.2	41.5	30.8	10.9	40.7	30.7	11.7	39.7	30.6	12.5	38.8	30.3	13.3	37.7	30.0	14.2
	16	43.8	28.0	10.2	42.9	27.9	10.9	42.0	27.8	11.7	41.1	27.6	12.5	40.1	27.3	13.4	39.0	26.9	14.3
	17	45.3	24.8	10.2	44.4	24.6	11.0	43.5	24.4	11.8	42.5	24.1	12.6	41.4	23.8	13.5	40.3	23.4	14.4
23	15	42.1	35.9	10.2	41.3	36.0	10.9	40.5	36.0	11.6	39.5	35.9	12.5	38.6	35.8	13.3	37.5	35.5	14.2
	16	43.4	33.6	10.2	42.5	33.6	10.9	41.6	33.6	11.7	40.7	33.4	12.5	39.7	33.2	13.4	38.6	32.9	14.3
	17	44.9	31.1	10.2	44.0	31.0	10.9	43.1	30.9	11.7	42.1	30.8	12.6	41.0	30.5	13.5	39.9	30.2	14.4
	18	46.4	28.2	10.2	45.5	28.1	11.0	44.5	27.9	11.8	43.5	27.7	12.6	42.4	27.4	13.5	41.2	27.0	14.5
27	18	46.2	39.0	10.2	45.2	39.1	11.0	44.3	39.1	11.8	43.3	39.1	12.6	42.2	38.9	13.5	41.0	38.6	14.5
	19	47.5	36.9	10.2	46.5	36.9	11.0	45.5	36.9	11.8	44.5	36.8	12.7	43.4	36.5	13.6	42.2	36.2	14.5
	20	48.8	34.4	10.2	47.9	34.4	11.0	46.8	34.3	11.9	45.7	34.2	12.7	44.6	33.9	13.6	43.3	33.5	14.6
	22	51.6	28.6	10.2	50.6	28.4	11.1	49.5	28.2	11.9	48.3	27.9	12.8	47.1	27.6	13.8	45.7	27.2	14.8
31	21	50.7	42.4	10.2	49.7	42.5	11.1	48.6	42.5	11.9	47.4	42.5	12.8	46.2	42.3	13.7	44.9	42.0	14.7
	22	51.8	40.2	10.2	50.8	40.3	11.1	49.7	40.2	11.9	48.5	40.1	12.8	47.3	39.9	13.8	45.9	39.6	14.8
	23	53.0	37.7	10.2	52.0	37.8	11.1	50.8	37.7	12.0	49.6	37.5	12.9	48.3	37.3	13.8	47.0	36.9	14.8
	25	55.7	32.2	10.2	54.6	32.0	11.1	53.4	31.8	12.0	52.1	31.6	12.9	50.8	31.2	13.9	49.3	30.8	15.0

# Performance Data at part load

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

Nominal Air Flow: **2600 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 560 at Nominal less 30% (2600 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	35.7	30.8	8.4	35.1	30.9	9.1	34.4	30.8	9.7	33.6	30.7	10.4	32.8	30.5	11.1	32.0	29.9	11.9
	15	37.0	28.8	8.4	36.3	28.7	9.1	35.6	28.6	9.7	34.8	28.5	10.4	33.9	28.2	11.2	33.0	27.9	12.0
	16	38.2	26.4	8.4	37.5	26.3	9.1	36.8	26.1	9.8	35.9	25.9	10.5	35.1	25.6	11.2	34.1	25.2	12.0
	17	39.5	23.7	8.4	38.8	23.5	9.1	38.0	23.2	9.8	37.1	23.0	10.5	36.2	22.6	11.3	35.2	22.2	12.1
23	15	36.8	33.2	8.4	36.1	33.2	9.1	35.4	33.2	9.7	34.6	32.5	10.4	33.8	31.7	11.2	32.9	30.8	12.0
	16	37.9	31.2	8.4	37.2	31.2	9.1	36.4	31.1	9.8	35.6	31.0	10.5	34.7	30.8	11.2	33.8	30.5	12.0
	17	39.2	29.1	8.4	38.4	29.0	9.1	37.6	28.9	9.8	36.8	28.7	10.5	35.9	28.5	11.3	34.9	28.1	12.1
	18	40.5	26.7	8.4	39.7	26.6	9.1	38.9	26.4	9.8	38.0	26.1	10.5	37.1	25.8	11.3	36.1	25.4	12.1
27	18	40.3	36.1	8.4	39.5	36.2	9.1	38.7	36.2	9.8	37.8	35.8	10.5	36.9	34.8	11.3	35.9	33.8	12.1
	19	41.4	34.3	8.4	40.7	34.3	9.1	39.8	34.2	9.8	38.9	34.1	10.6	37.9	33.9	11.3	36.9	33.5	12.2
	20	42.6	32.2	8.4	41.8	32.2	9.1	40.9	32.1	9.8	40.0	31.9	10.6	39.0	31.6	11.4	37.9	31.2	12.2
	22	45.1	27.3	8.4	44.2	27.1	9.1	43.2	26.9	9.8	42.2	26.6	10.6	41.1	26.2	11.4	40.0	25.8	12.3
31	21	44.2	39.2	8.4	43.4	39.3	9.1	42.5	39.3	9.8	41.5	39.2	10.6	40.4	38.3	11.4	39.3	37.2	12.3
	22	45.3	37.4	8.4	44.4	37.4	9.1	43.4	37.4	9.8	42.4	37.2	10.6	41.3	37.0	11.4	40.2	36.6	12.3
	23	46.3	35.3	8.3	45.4	35.3	9.1	44.4	35.2	9.8	43.4	35.0	10.6	42.3	34.7	11.5	41.1	34.3	12.3
	25	48.7	30.6	8.3	47.7	30.5	9.0	46.7	30.2	9.8	45.6	29.9	10.7	44.4	29.6	11.5	43.1	29.1	12.4

### OPA 560 at Nominal less 40% (2600 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	30.6	27.4	7.4	30.1	27.4	7.9	29.5	27.3	8.5	28.9	26.8	9.0	28.2	26.1	9.7	27.5	25.4	10.3
	15	31.7	25.6	7.4	31.1	25.6	7.9	30.5	25.5	8.5	29.9	25.4	9.1	29.2	25.1	9.7	28.4	24.9	10.3
	16	32.8	23.6	7.4	32.2	23.5	7.9	31.5	23.4	8.5	30.9	23.2	9.1	30.1	22.9	9.7	29.4	22.6	10.4
	17	33.9	21.3	7.3	33.3	21.2	7.9	32.6	21.0	8.5	31.9	20.7	9.1	31.1	20.4	9.8	30.3	20.1	10.4
23	15	31.5	29.4	7.4	31.0	28.9	7.9	30.4	28.3	8.5	29.7	27.6	9.1	29.0	27.0	9.7	28.3	26.2	10.3
	16	32.5	27.7	7.4	31.9	27.7	7.9	31.2	27.7	8.5	30.6	27.6	9.1	29.9	27.4	9.7	29.1	27.0	10.4
	17	33.5	26.0	7.4	32.9	25.9	7.9	32.3	25.8	8.5	31.6	25.6	9.1	30.8	25.4	9.7	30.0	25.1	10.4
	18	34.7	24.0	7.3	34.0	23.8	7.9	33.4	23.7	8.5	32.6	23.4	9.1	31.8	23.2	9.8	31.0	22.8	10.5
27	18	34.5	32.0	7.3	33.9	31.8	7.9	33.2	31.1	8.5	32.5	30.4	9.1	31.7	29.6	9.8	30.9	28.8	10.5
	19	35.5	30.5	7.3	34.8	30.5	7.9	34.1	30.4	8.5	33.4	30.3	9.1	32.6	30.1	9.8	31.7	29.6	10.5
	20	36.5	28.7	7.3	35.8	28.7	7.9	35.1	28.6	8.5	34.3	28.4	9.1	33.5	28.2	9.8	32.6	27.9	10.5
	22	38.6	24.6	7.2	37.8	24.4	7.9	37.1	24.2	8.5	36.2	23.9	9.2	35.3	23.6	9.9	34.4	23.2	10.6
31	21	37.9	34.8	7.3	37.2	34.9	7.9	36.4	34.3	8.5	35.6	33.5	9.2	34.7	32.6	9.8	33.8	31.7	10.6
	22	38.7	33.3	7.2	38.0	33.3	7.9	37.2	33.2	8.5	36.4	33.1	9.2	35.5	32.9	9.9	34.5	32.4	10.6
	23	39.6	31.5	7.2	38.9	31.5	7.8	38.1	31.4	8.5	37.2	31.2	9.2	36.3	31.0	9.9	35.3	30.6	10.6
	25	41.6	27.5	7.1	40.8	27.4	7.8	40.0	27.2	8.5	39.1	26.9	9.2	38.1	26.6	9.9	37.0	26.2	10.6

## Cooling Capacity (kW)

TC = Total Capacity (kW).  
 SC = Sensible Capacity (kW).  
 PI = Power Input (kW)  
 E.A.T. = Entering Air Temperature .

Nominal Air Flow: **2600 l/s**

**Note:** Total Capacity figures are **gross** and do not include allowance for fan motor heat loss.

### OPA 560 at Nominal less 50% (2600 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	25.1	22.8	6.3	24.6	22.6	6.8	24.2	22.1	7.2	23.7	21.6	7.7	23.1	21.1	8.2	22.5	20.5	8.8
	15	25.9	21.4	6.3	25.5	21.4	6.7	25.0	21.3	7.2	24.5	21.2	7.7	23.9	21.0	8.3	23.3	20.7	8.8
	16	26.8	19.8	6.3	26.4	19.7	6.7	25.9	19.6	7.2	25.3	19.4	7.7	24.7	19.2	8.3	24.0	18.9	8.8
	17	27.7	18.0	6.2	27.3	17.8	6.7	26.7	17.7	7.2	26.1	17.4	7.7	25.5	17.2	8.3	24.8	16.8	8.8
23	15	25.8	23.8	6.3	25.4	23.3	6.8	24.9	22.9	7.2	24.4	22.3	7.7	23.8	21.8	8.2	23.2	21.1	8.8
	16	26.6	23.2	6.3	26.1	23.2	6.7	25.6	23.1	7.2	25.1	23.0	7.7	24.5	22.4	8.3	23.8	21.8	8.8
	17	27.5	21.8	6.2	27.0	21.7	6.7	26.5	21.6	7.2	25.9	21.5	7.7	25.3	21.3	8.3	24.6	21.0	8.8
	18	28.4	20.2	6.2	27.9	20.1	6.7	27.4	19.9	7.2	26.8	19.7	7.7	26.1	19.4	8.3	25.4	19.1	8.9
27	18	28.3	26.2	6.2	27.8	25.7	6.7	27.2	25.2	7.2	26.6	24.6	7.7	26.0	24.0	8.3	25.3	23.3	8.9
	19	29.1	25.5	6.2	28.6	25.5	6.7	28.0	25.5	7.2	27.4	25.4	7.7	26.7	24.7	8.3	26.0	24.0	8.9
	20	29.9	24.1	6.1	29.4	24.1	6.7	28.8	24.0	7.2	28.2	23.9	7.7	27.5	23.6	8.3	26.7	23.3	8.9
	22	31.7	20.8	6.1	31.1	20.7	6.6	30.4	20.5	7.1	29.7	20.2	7.7	29.0	19.9	8.3	28.2	19.6	8.9
31	21	31.1	29.0	6.1	30.5	28.5	6.6	29.9	27.9	7.2	29.2	27.2	7.7	28.5	26.4	8.3	27.7	25.6	8.9
	22	31.8	27.9	6.0	31.2	28.0	6.6	30.6	27.9	7.1	29.9	27.8	7.7	29.1	27.1	8.3	28.3	26.3	8.9
	23	32.5	26.5	6.0	31.9	26.5	6.6	31.3	26.4	7.1	30.6	26.2	7.7	29.8	26.0	8.3	28.9	25.6	8.9
	25	34.2	23.4	5.9	33.6	23.2	6.5	32.9	23.0	7.1	32.1	22.8	7.7	31.3	22.5	8.3	30.4	22.1	8.9

### OPA 560 at Minimum Capacity (2600 l/s)

Indoor coil E.A.T.		Outdoor coil Entering Air Temperature °C DB																	
D.B. °C	W.B. °C	23			27			31			35			39			43		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
21	14	17.8	15.6	5.1	17.5	15.5	5.4	17.2	15.2	5.8	16.8	14.8	6.1	16.5	14.4	6.5	16.0	14.0	6.9
	15	18.4	14.6	5.1	18.1	14.6	5.4	17.8	14.6	5.8	17.4	14.5	6.1	17.0	14.4	6.5	16.6	14.2	6.9
	16	19.0	13.5	5.0	18.7	13.4	5.4	18.3	13.3	5.8	18.0	13.2	6.1	17.6	13.1	6.5	17.1	12.9	6.9
	17	19.6	12.2	5.0	19.3	12.1	5.4	19.0	12.0	5.7	18.6	11.8	6.1	18.1	11.6	6.5	17.7	11.4	6.9
23	15	18.3	16.3	5.1	18.0	16.0	5.4	17.7	15.7	5.8	17.3	15.3	6.1	16.9	14.9	6.5	16.5	14.5	6.9
	16	18.8	15.9	5.1	18.5	15.9	5.4	18.2	15.8	5.8	17.8	15.8	6.1	17.4	15.4	6.5	17.0	14.9	6.9
	17	19.5	14.8	5.0	19.1	14.8	5.4	18.8	14.8	5.7	18.4	14.7	6.1	18.0	14.5	6.5	17.5	14.4	6.9
	18	20.1	13.7	5.0	19.8	13.6	5.3	19.4	13.5	5.7	19.0	13.4	6.1	18.5	13.3	6.5	18.1	13.0	6.9
27	18	20.0	18.0	5.0	19.7	17.7	5.3	19.3	17.3	5.7	18.9	16.9	6.1	18.5	16.5	6.5	18.0	16.0	6.9
	19	20.6	17.5	4.9	20.2	17.5	5.3	19.9	17.5	5.7	19.4	17.4	6.1	19.0	17.0	6.5	18.5	16.5	6.9
	20	21.2	16.5	4.9	20.8	16.5	5.3	20.4	16.4	5.7	20.0	16.3	6.1	19.5	16.2	6.5	19.0	16.0	6.9
	22	22.4	14.1	4.8	22.0	14.0	5.2	21.6	13.9	5.6	21.1	13.8	6.0	20.6	13.6	6.5	20.0	13.3	6.9
31	21	22.0	19.9	4.8	21.6	19.6	5.2	21.2	19.2	5.6	20.7	18.7	6.0	20.2	18.2	6.5	19.7	17.7	6.9
	22	22.5	19.2	4.8	22.1	19.2	5.2	21.6	19.2	5.6	21.2	19.1	6.0	20.7	18.7	6.5	20.1	18.1	6.9
	23	23.0	18.2	4.8	22.6	18.2	5.2	22.1	18.1	5.6	21.7	18.0	6.0	21.1	17.9	6.4	20.5	17.6	6.9
	25	24.2	15.9	4.7	23.7	15.8	5.1	23.3	15.7	5.5	22.7	15.6	6.0	22.2	15.4	6.4	21.6	15.1	6.9

# Performance Data at part load

## Heating Capacity (kW)

G = Gross Capacity (kW), based on nominal air flow.  
N = Net Heating Capacity (kW) allowing for average defrost.  
PI = Power Input (kW)

○ = Nominal Capacity (kW)  
Nominal Air Flow: 1250 l/s

### OPA 250 at Maximum Capacity (1250 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	-5			-3			-1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	22.1	19.3	8.0	23.3	19.1	8.2	24.6	19.4	8.4	25.8	20.7	8.4	27.1	23.3	8.4	28.4	27.7	8.6	29.6	29.6	8.7	30.9	30.9	8.9
20	21.7	19.1	8.6	23.0	18.8	8.8	24.3	19.1	9.0	25.5	20.4	9.0	26.8	23.0	9.0	28.0	27.5	9.2	29.3	29.3	9.3	30.6	30.6	9.5
25	21.1	18.5	9.2	22.3	18.3	9.4	23.6	18.6	9.7	24.8	19.9	9.7	26.1	22.5	9.7	27.3	26.9	9.8	28.6	28.6	10.0	29.9	29.9	10.2

### OPA 250 at Nominal Capacity (1250 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	-5			-3			-1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	20.2	17.7	7.0	21.4	17.5	7.1	22.6	17.8	7.3	23.7	18.9	7.3	24.9	21.4	7.3	26.0	25.4	7.4	27.2	27.2	7.5	28.3	28.3	7.7
20	19.9	17.5	7.5	21.1	17.3	7.7	22.3	17.6	7.9	23.4	18.7	7.9	24.6	21.1	7.9	25.7	25.2	8.0	26.9	26.9	8.1	28.0	28.0	8.2
25	19.3	17.0	8.1	20.5	16.8	8.3	21.6	17.0	8.5	22.8	18.2	8.5	23.9	20.6	8.5	25.1	24.7	8.6	26.2	26.2	8.8	27.4	27.4	8.9

### OPA 250 at Nominal less 10% (1250 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	-5			-3			-1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	18.4	16.1	6.0	19.4	15.9	6.1	20.5	16.2	6.3	21.5	17.2	6.3	22.6	19.4	6.3	23.6	23.1	6.4	24.7	24.7	6.5	25.7	25.7	6.6
20	18.1	15.9	6.5	19.2	15.7	6.6	20.2	15.9	6.7	21.3	17.0	6.8	22.3	19.2	6.7	23.4	22.9	6.8	24.4	24.4	6.9	25.5	25.5	7.0
25	17.5	15.4	6.9	18.6	15.2	7.1	19.6	15.5	7.2	20.7	16.5	7.3	21.7	18.7	7.2	22.8	22.4	7.4	23.8	23.8	7.5	24.9	24.9	7.6

### OPA 250 at Nominal less 20% (1250 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	-5			-3			-1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	16.2	14.2	5.1	17.1	14.0	5.2	18.0	14.2	5.3	19.0	15.2	5.4	19.9	17.1	5.3	20.8	20.8	5.4	21.7	21.7	5.5	22.7	22.7	5.6
20	16.0	14.0	5.5	16.9	13.8	5.6	17.8	14.0	5.7	18.7	15.0	5.7	19.7	16.9	5.7	20.6	20.6	5.8	21.5	21.5	5.9	22.4	22.4	6.0
25	15.4	13.6	5.9	16.4	13.4	6.0	17.3	13.6	6.2	18.2	14.6	6.2	19.1	16.5	6.2	20.1	20.1	6.2	21.0	21.0	6.3	21.9	21.9	6.4

### OPA 250 at Nominal less 30% (1250 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	-5			-3			-1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	14.2	12.4	4.5	15.0	12.3	4.5	15.8	12.5	4.6	16.6	13.3	4.6	17.4	15.0	4.6	18.2	18.2	4.7	19.0	19.0	4.7	19.8	19.8	4.8
20	14.0	12.2	4.7	14.8	12.1	4.8	15.6	12.3	4.9	16.4	13.1	4.9	17.2	14.8	4.9	18.0	18.0	5.0	18.8	18.8	5.1	19.6	19.6	5.1
25	13.5	11.9	5.1	14.3	11.7	5.2	15.1	11.9	5.3	15.9	12.7	5.3	16.7	14.4	5.3	17.6	17.6	5.4	18.4	18.4	5.4	19.2	19.2	5.5

## Heating Capacity (kW)

G = Gross Capacity (kW), based on nominal air flow.  
 N = Net Heating Capacity (kW) allowing for average defrost.  
 PI = Power Input (kW)

Nominal Air Flow: **1250 l/s**

### OPA 250 at Nominal less 40% (1250 l/s)

Air on Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	12.1	10.6	3.8	12.8	10.4	3.9	13.4	10.6	3.9	14.1	11.3	3.9	14.8	14.8	3.9	15.5	15.5	4.0	16.2	16.2	4.0	16.9	16.9	4.1
20	11.9	10.4	4.1	12.6	10.3	4.1	13.3	10.5	4.2	14.0	11.2	4.2	14.6	14.6	4.2	15.3	15.3	4.2	16.0	16.0	4.3	16.7	16.7	4.3
25	11.5	10.1	4.3	12.2	10.0	4.4	12.9	10.2	4.5	13.6	10.9	4.5	14.3	14.3	4.5	14.9	14.9	4.5	15.6	15.6	4.6	16.3	16.3	4.6

### OPA 250 at Nominal less 50% (1250 l/s)

Air on Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	9.9	8.7	3.2	10.5	8.6	3.2	11.1	8.7	3.2	11.6	9.3	3.3	12.2	12.2	3.2	12.8	12.8	3.3	13.3	13.3	3.3	13.9	13.9	3.3
20	9.8	8.6	3.3	10.4	8.5	3.4	10.9	8.6	3.4	11.5	9.2	3.4	12.1	12.1	3.4	12.6	12.6	3.5	13.2	13.2	3.5	13.8	13.8	3.5
25	9.5	8.3	3.5	10.0	8.2	3.6	10.6	8.4	3.6	11.2	8.9	3.7	11.7	11.7	3.6	12.3	12.3	3.7	12.9	12.9	3.7	13.4	13.4	3.8

### OPA 250 at Minimum Capacity (1250 l/s)

Air on Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	4.9	4.3	2.2	5.2	4.2	2.2	5.4	4.3	2.2	5.7	4.6	2.2	6.0	5.1	2.2	6.3	6.1	2.2	6.5	6.5	2.2	6.8	6.8	2.2
20	4.8	4.2	2.3	5.1	4.2	2.3	5.4	4.2	2.3	5.6	4.5	2.3	5.9	5.1	2.3	6.2	6.1	2.3	6.5	6.5	2.3	6.8	6.8	2.3
25	4.6	4.1	2.3	4.9	4.0	2.4	5.2	4.1	2.4	5.5	4.4	2.4	5.8	5.0	2.4	6.0	6.0	2.4	6.3	6.3	2.4	6.6	6.6	2.4

## Indoor Air Flow Correction Factors at nominal conditions

Indoor Air Flow (%)

	-20	-10	Rated	+10
Total Capacity	0.95	0.975	1.0	1.025
Sensible Capacity	0.90	0.950	1.0	1.050

# Performance Data at part load

## Heating Capacity (kW)

G = Gross Capacity (kW), based on nominal air flow.  
N = Net Heating Capacity (kW) allowing for average defrost.  
PI = Power Input (kW)

○ = Nominal Capacity (kW)  
Nominal Air Flow: **1800 l/s**

### OPA 350 at Maximum Capacity (1800 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	34.9	30.5	14.4	36.8	30.2	14.7	38.8	30.6	15	40.8	32.6	15.1	42.8	36.8	15.0	42.8	36.8	15	44.8	43.8	15.3	48.8	48.8	15.7
20	34.3	30.1	15.4	36.3	29.8	15.7	38.3	30.2	16.1	40.3	32.2	16.1	42.3	36.4	16.1	42.3	36.4	16.1	44.3	43.4	16.3	48.3	48.3	16.8
25	33.2	29.3	16.4	35.2	28.9	16.7	37.2	29.4	17.2	39.2	31.4	17.2	41.2	35.5	17.2	41.2	35.5	17.2	43.2	42.5	17.4	47.2	47.2	18.0

### OPA 350 at Nominal Capacity (1800 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	27.9	24.4	10.2	29.5	24.1	10.3	31.0	24.5	10.5	32.6	26.1	10.5	34.2	29.4	10.5	35.8	35.0	10.6	37.4	37.4	10.8	39.0	39.0	10.9
20	27.5	24.1	10.9	29.0	23.8	11.0	30.6	24.2	11.2	32.2	25.8	11.3	33.8	29.1	11.2	35.4	34.7	11.4	37.0	37.0	11.5	38.6	38.6	11.7
25	26.6	23.4	11.6	28.2	23.1	11.8	29.8	23.5	12.0	31.3	25.1	12.1	32.9	28.4	12.0	34.5	34.0	12.2	36.1	36.1	12.4	37.7	37.7	12.5

### OPA 350 at Nominal less 10% (1800 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	25.1	22.0	8.9	26.5	21.7	9.1	27.9	22.0	9.2	29.4	23.5	9.2	30.8	26.5	9.2	32.2	31.5	9.3	33.7	33.7	9.4	35.1	35.1	9.5
20	24.7	21.7	9.5	26.1	21.4	9.7	27.6	21.7	9.9	29.0	23.2	9.9	30.4	26.2	9.9	31.9	31.2	10.0	33.3	33.3	10.1	34.7	34.7	10.2
25	23.9	21.1	10.2	25.4	20.8	10.3	26.8	21.1	10.5	28.2	22.6	10.6	29.6	25.6	10.5	31.1	30.6	10.7	32.5	32.5	10.8	33.9	33.9	10.9

### OPA 350 at Nominal less 20% (1800 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	22.3	19.5	7.8	23.6	19.3	7.9	24.8	19.6	8.0	26.1	20.9	8.0	27.4	23.5	8.0	28.7	28.0	8.1	29.9	29.9	8.1	31.2	31.2	8.2
20	22.0	19.3	8.3	23.2	19.0	8.4	24.5	19.3	8.5	25.8	20.6	8.6	27.1	23.3	8.5	28.3	27.8	8.6	29.6	29.6	8.7	30.9	30.9	8.8
25	21.3	18.7	8.9	22.5	18.5	9.0	23.8	18.8	9.1	25.1	20.1	9.2	26.4	22.7	9.1	27.6	27.2	9.2	28.9	28.9	9.3	30.2	30.2	9.4

### OPA 350 at Nominal less 30% (1800 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	19.9	17.4	6.8	21.0	17.2	6.9	22.2	17.5	7.0	23.3	18.6	7.0	24.4	21.0	7.0	25.6	25.0	7.0	26.7	26.7	7.1	27.9	27.9	7.1
20	19.6	17.2	7.3	20.7	17.0	7.3	21.9	17.3	7.4	23.0	18.4	7.5	24.2	20.8	7.4	25.3	24.8	7.5	26.4	26.4	7.6	27.6	27.6	7.6
25	19.0	16.7	7.7	20.1	16.5	7.8	21.3	16.8	7.9	22.4	17.9	8.0	23.5	20.3	7.9	24.7	24.3	8.0	25.8	25.8	8.1	26.9	26.9	8.2



## Heating Capacity (kW)

G = Gross Capacity (kW), based on nominal air flow.  
 N = Net Heating Capacity (kW) allowing for average defrost.  
 PI = Power Input (kW)

Nominal Air Flow: **1800 l/s**

### OPA 350 at Nominal less 40% (1800 l/s)

D.B. °C	Outdoor coil entering air temperature °C DB																							
	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	16.7	14.6	5.8	17.7	14.5	5.9	18.6	14.7	5.9	19.6	15.6	5.9	20.5	17.6	5.9	21.5	21.5	6.0	22.4	22.4	6.0	23.4	23.4	6.0
20	16.5	14.5	6.2	17.4	14.3	6.2	18.4	14.5	6.3	19.3	15.5	6.3	20.3	17.5	6.3	21.2	21.2	6.4	22.2	22.2	6.4	23.2	23.2	6.4
25	15.9	14.0	6.6	16.9	13.9	6.6	17.9	14.1	6.7	18.8	15.0	6.7	19.8	17.0	6.7	20.7	20.7	6.8	21.7	21.7	6.8	22.6	22.6	6.9

### OPA 350 at Nominal less 50% (1800 l/s)

D.B. °C	Outdoor coil entering air temperature °C DB																							
	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	13.9	12.2	5.1	14.7	12.1	5.2	15.5	12.2	5.2	16.3	13.0	5.2	17.1	14.7	5.2	17.9	17.9	5.2	18.7	18.7	5.3	19.5	19.5	5.3
20	13.7	12.0	5.4	14.5	11.9	5.5	15.3	12.1	5.5	16.1	12.9	5.5	16.9	14.5	5.5	17.7	17.7	5.6	18.5	18.5	5.6	19.3	19.3	5.6
25	13.3	11.7	5.7	14.1	11.5	5.8	14.9	11.7	5.9	15.7	12.5	5.9	16.5	14.2	5.9	17.3	17.3	5.9	18.1	18.1	6.0	18.9	18.9	6.0

### OPA 350 at Minimum Capacity (1800 l/s)

D.B. °C	Outdoor coil entering air temperature °C DB																							
	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	10.5	9.2	4.3	11.1	9.1	4.3	11.7	9.2	4.4	12.3	9.8	4.4	12.9	11.1	4.4	13.5	13.2	4.4	14.1	14.1	4.4	14.7	14.7	4.4
20	10.3	9.1	4.5	10.9	9.0	4.6	11.5	9.1	4.6	12.1	9.7	4.6	12.7	11.0	4.6	13.3	13.1	4.6	13.9	13.9	4.6	14.5	14.5	4.6
25	10.0	8.8	4.8	10.6	8.7	4.8	11.2	8.8	4.8	11.8	9.4	4.8	12.4	10.7	4.8	13.0	12.8	4.9	13.6	13.6	4.9	14.2	14.2	4.9

## Indoor Air Flow Correction Factors at nominal conditions

Indoor Air Flow (%)

	-20	-10	Rated	+10
Total Capacity	0.95	0.975	1.0	1.025
Sensible Capacity	0.90	0.950	1.0	1.050

# Performance Data at part load

## Heating Capacity (kW)

G = Gross Capacity (kW), based on nominal air flow. ○ = Nominal Capacity (kW)  
 N = Net Heating Capacity (kW) allowing for average defrost. Nominal Air Flow: 2200 l/s  
 PI = Power Input (kW)

### OPA 450 at Maximum Capacity (2200 l/s)

Air on		Outdoor coil entering air temperature °C DB																							
D.B. °C	- 5			- 3			- 1			1			3			5			7			9			
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	
15	41.1	36.0	17.5	43.4	35.5	17.9	45.8	36.1	18.3	48.1	38.4	18.3	50.5	43.4	18.3	52.8	51.6	18.6	55.1	55.1	18.8	57.5	57.5	19.1	
20	40.5	35.5	18.7	42.8	35.1	19.0	45.2	35.6	19.5	47.5	38.0	19.5	49.9	42.9	19.5	52.2	51.2	19.8	54.5	54.5	20.1	56.9	56.9	20.4	
25	39.2	34.5	19.9	41.5	34.0	20.3	43.9	34.6	20.8	46.2	37.0	20.8	48.6	41.9	20.8	50.9	50.1	21.1	53.2	53.2	21.4	55.6	55.6	21.7	

### OPA 450 at Nominal Capacity (2200 l/s)

Air on		Outdoor coil entering air temperature °C DB																							
D.B. °C	- 5			- 3			- 1			1			3			5			7			9			
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	
15	33.5	29.3	12.6	35.4	28.9	12.8	37.3	29.4	13.0	39.2	31.3	13.1	41.1	35.3	13.0	43.0	42.1	13.2	44.9	44.9	13.3	46.8	46.8	13.5	
20	33.0	28.9	13.4	34.9	28.6	13.6	36.8	29.0	13.9	38.7	30.9	13.9	40.6	34.9	13.9	42.5	41.7	14.1	44.4	44.4	14.2	46.3	46.3	14.4	
25	31.9	28.1	14.3	33.8	27.7	14.5	35.7	28.2	14.8	37.6	30.1	14.9	39.5	34.1	14.8	41.5	40.8	15.0	43.4	43.4	15.2	45.3	45.3	15.4	

### OPA 450 at Nominal less 10% (2200 l/s)

Air on		Outdoor coil entering air temperature °C DB																							
D.B. °C	- 5			- 3			- 1			1			3			5			7			9			
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	
15	30.1	26.4	11.0	31.9	26.1	11.1	33.6	26.5	11.3	35.3	28.2	11.3	37.0	31.8	11.3	38.7	37.9	11.4	40.4	40.4	11.5	42.2	42.2	11.6	
20	29.7	26.1	11.7	31.4	25.7	11.8	33.1	26.1	12.0	34.8	27.9	12.0	36.6	31.5	12.0	38.3	37.5	12.1	40.0	40.0	12.3	41.7	41.7	12.4	
25	28.7	25.3	12.4	30.5	25.0	12.6	32.2	25.4	12.8	33.9	27.1	12.8	35.6	30.7	12.8	37.3	36.8	13.0	39.1	39.1	13.1	40.8	40.8	13.2	

### OPA 450 at Nominal less 20% (2200 l/s)

Air on		Outdoor coil entering air temperature °C DB																							
D.B. °C	- 5			- 3			- 1			1			3			5			7			9			
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	
15	26.8	23.4	9.6	28.3	23.1	9.7	29.8	23.5	9.8	31.3	25.0	9.8	32.9	28.2	9.8	34.4	33.6	9.8	35.9	35.9	9.9	37.4	37.4	10.0	
20	26.4	23.1	10.2	27.9	22.8	10.3	29.4	23.2	10.4	30.9	24.7	10.4	32.5	27.9	10.4	34.0	33.3	10.5	35.5	35.5	10.6	37.0	37.0	10.7	
25	25.5	22.5	10.8	27.0	22.2	10.9	28.6	22.5	11.1	30.1	24.1	11.1	31.6	27.3	11.1	33.1	32.7	11.2	34.7	34.7	11.3	36.2	36.2	11.4	

### OPA 450 at Nominal less 30% (2200 l/s)

Air on		Outdoor coil entering air temperature °C DB																							
D.B. °C	- 5			- 3			- 1			1			3			5			7			9			
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	
15	23.4	20.5	8.4	24.8	20.3	8.4	26.1	20.6	8.5	27.4	21.9	8.5	28.8	24.7	8.5	30.1	29.5	8.6	31.5	31.5	8.6	32.8	32.8	8.7	
20	23.1	20.3	8.9	24.4	20.0	8.9	25.8	20.3	9.0	27.1	21.7	9.0	28.4	24.5	9.0	29.8	29.2	9.1	31.1	31.1	9.2	32.5	32.5	9.2	
25	22.4	19.7	9.4	23.7	19.4	9.5	25.0	19.7	9.6	26.4	21.1	9.6	27.7	23.9	9.6	29.0	28.6	9.6	30.4	30.4	9.7	31.7	31.7	9.8	

## Heating Capacity (kW)

G = Gross Capacity (kW), based on nominal air flow.  
 N = Net Heating Capacity (kW) allowing for average defrost.  
 PI = Power Input (kW)

Nominal Air Flow: **2200 l/s**

### OPA 450 at Nominal less 40% (2200 l/s)

Air on D.B. °C		Outdoor coil entering air temperature °C DB																										
		- 5			- 3			- 1			1			3			5			7			9					
		G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15		20.1	17.6	7.5	21.2	17.4	7.6	22.4	17.7	7.6	23.5	18.8	7.6	24.7	21.2	7.6	25.8	25.3	7.7	27.0	27.0	7.7	28.1	28.1	7.7			
20		19.8	17.4	7.9	20.9	17.1	8.0	22.1	17.4	8.1	23.2	18.6	8.1	24.4	21.0	8.1	25.5	25.0	8.1	26.7	26.7	8.2	27.8	27.8	8.2			
25		19.2	16.9	8.4	20.3	16.6	8.5	21.5	16.9	8.5	22.6	18.1	8.6	23.7	20.5	8.5	24.9	24.5	8.6	26.0	26.0	8.7	27.2	27.2	8.7			

### OPA 450 at Nominal less 50% (2200 l/s)

Air on D.B. °C		Outdoor coil entering air temperature °C DB																										
		- 5			- 3			- 1			1			3			5			7			9					
		G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15		17.5	15.3	6.8	18.5	15.2	6.8	19.5	15.4	6.9	20.5	16.4	6.9	21.5	18.5	6.9	22.5	22.0	6.9	23.5	23.5	6.9	24.5	24.5	6.9			
20		17.3	15.1	7.1	18.3	15.0	7.2	19.3	15.2	7.3	20.3	16.2	7.3	21.3	18.3	7.3	22.3	21.8	7.3	23.3	23.3	7.3	24.3	24.3	7.4			
25		16.7	14.7	7.5	17.7	14.5	7.6	18.7	14.8	7.7	19.7	15.8	7.7	20.7	17.9	7.7	21.7	21.4	7.7	22.7	22.7	7.8	23.7	23.7	7.8			

### OPA 450 at Minimum Capacity (2200 l/s)

Air on D.B. °C		Outdoor coil entering air temperature °C DB																										
		- 5			- 3			- 1			1			3			5			7			9					
		G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15		12.4	10.9	6.0	13.1	10.7	6.0	13.8	10.9	6.0	14.2	11.1	6.0	14.5	11.6	6.0	15.3	13.1	6.0	16.0	15.6	6.0	16.7	16.7	6.1			
20		12.2	10.7	6.2	12.9	10.6	6.3	13.7	10.8	6.3	14.0	11.0	6.3	14.4	11.5	6.3	15.1	13.0	6.3	15.8	15.5	6.3	16.5	16.5	6.3			
25		11.8	10.4	6.5	12.6	10.3	6.5	13.3	10.5	6.6	13.6	10.7	6.6	14.0	11.2	6.6	14.7	12.7	6.6	15.4	15.2	6.6	16.1	16.1	6.7			

## Indoor Air Flow Correction Factors at nominal conditions

Indoor Air Flow (%)

	-20	-10	Rated	+10
Total Capacity	0.95	0.975	1.0	1.025
Sensible Capacity	0.90	0.950	1.0	1.050

## Heating Capacity (kW)

G = Gross Capacity (kW), based on nominal air flow.  
 N = Net Heating Capacity (kW) allowing for average defrost.  
 PI = Power Input (kW)

  = Nominal Capacity (kW)  
 Nominal Air Flow: **2600 l/s**

### OPA 560 at Maximum Capacity (2600 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	47.5	41.6	20.3	50.2	41.1	20.7	52.9	41.8	21.2	55.6	44.5	21.3	58.4	50.2	21.2	61.1	59.7	21.6	63.8	63.8	21.9	66.5	66.5	22.2
20	46.8	41.1	21.7	49.5	40.6	22.1	52.2	41.2	22.6	54.9	43.9	22.7	57.7	49.6	22.6	60.4	59.2	23.0	63.1	63.1	23.4	65.8	65.8	23.7
25	45.3	39.9	23.1	48.0	39.4	23.6	50.7	40.0	24.2	53.4	42.7	24.2	56.2	48.4	24.2	58.9	58.0	24.6	61.6	61.6	24.9	64.3	64.3	25.3

### OPA 560 at Nominal Capacity (2600 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	42.9	37.6	16.8	45.4	37.1	17.0	47.8	37.7	17.4	50.3	40.2	17.4	52.7	45.3	17.4	55.2	54.0	17.6	57.6	57.6	17.8	60.1	60.1	18.0
20	42.3	37.1	17.9	44.7	36.6	18.2	47.2	37.2	18.6	49.6	39.7	18.6	52.1	44.8	18.6	54.5	53.5	18.8	57.0	57.0	19.1	59.4	59.4	19.3
25	40.9	36.0	19.1	43.4	35.6	19.5	45.8	36.2	19.9	48.3	38.6	19.9	50.7	43.7	19.9	53.2	52.4	20.2	55.6	55.6	20.4	58.1	58.1	20.7

### OPA 560 at Nominal less 10% (2600 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	39.3	34.4	14.6	41.5	34.0	14.8	43.7	34.5	15.1	46.0	36.7	15.1	48.2	41.4	15.1	50.5	49.3	15.2	52.7	52.7	15.4	54.9	54.9	15.6
20	38.7	33.9	15.5	40.9	33.5	15.8	43.2	34.0	16.1	45.4	36.3	16.1	47.6	41.0	16.1	49.9	48.9	16.3	52.1	52.1	16.5	54.4	54.4	16.7
25	37.4	33.0	16.6	39.7	32.5	16.8	41.9	33.1	17.2	44.2	35.3	17.2	46.4	40.0	17.2	48.6	47.9	17.4	50.9	50.9	17.6	53.1	53.1	17.8

### OPA 560 at Nominal less 20% (2600 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	34.3	30.1	12.4	36.3	29.7	12.6	38.3	30.2	12.8	40.2	32.1	12.8	42.2	36.2	12.8	44.1	43.2	12.9	46.1	46.1	13.0	48.1	48.1	13.1
20	33.8	29.7	13.2	35.8	29.3	13.4	37.8	29.8	13.6	39.7	31.7	13.6	41.7	35.8	13.6	43.6	42.8	13.8	45.6	45.6	13.9	47.6	47.6	14.0
25	32.7	28.8	14.1	34.7	28.5	14.3	36.7	28.9	14.5	38.6	30.9	14.6	40.6	35.0	14.5	42.5	41.9	14.7	44.5	44.5	14.8	46.5	46.5	15.0

### OPA 560 at Nominal less 30% (2600 l/s)

Air on

Outdoor coil entering air temperature °C DB

D.B. °C	- 5			- 3			- 1			1			3			5			7			9		
	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15	30.0	26.3	10.9	31.8	26.0	11.0	33.5	26.4	11.1	35.2	28.1	11.2	36.9	31.7	11.1	38.6	37.8	11.2	40.3	40.3	11.3	42.0	42.0	11.4
20	29.6	26.0	11.6	31.3	25.6	11.7	33.0	26.1	11.9	34.7	27.8	11.9	36.5	31.4	11.9	38.2	37.4	12.0	39.9	39.9	12.1	41.6	41.6	12.2
25	28.7	25.2	12.3	30.4	24.9	12.5	32.1	25.3	12.7	33.8	27.0	12.7	35.5	30.6	12.7	37.2	36.7	12.8	38.9	38.9	12.9	40.7	40.7	13.0

## Heating Capacity (kW)

G = Gross Capacity (kW), based on nominal air flow.  
 N = Net Heating Capacity (kW) allowing for average defrost.  
 PI = Power Input (kW)

Nominal Air Flow: **2600 l/s**

### OPA 560 at Nominal less 40% (2600 l/s)

Air on D.B. °C		Outdoor coil entering air temperature °C DB																										
		- 5			- 3			- 1			1			3			5			7			9					
		G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15		25.8	22.6	9.1	27.2	22.3	9.2	28.7	22.6	9.3	30.2	24.1	9.3	31.6	27.2	9.3	33.1	32.4	9.3	34.6	34.6	9.4	36.0	36.0	9.4			
20		25.4	22.3	9.6	26.8	22.0	9.7	28.3	22.3	9.8	29.8	23.8	9.8	31.3	26.9	9.8	32.7	32.1	9.9	34.2	34.2	9.9	35.7	35.7	10.0			
25		24.6	21.6	10.2	26.0	21.3	10.3	27.5	21.7	10.4	29.0	23.2	10.4	30.4	26.2	10.4	31.9	31.4	10.5	33.4	33.4	10.6	34.8	34.8	10.6			

### OPA 560 at Nominal less 50% (2600 l/s)

Air on D.B. °C		Outdoor coil entering air temperature °C DB																										
		- 5			- 3			- 1			1			3			5			7			9					
		G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15		21.5	18.8	7.8	22.7	18.6	7.9	23.9	18.9	7.9	25.1	20.1	7.9	26.4	22.7	7.9	27.6	27.0	7.9	28.8	28.8	8.0	30.0	30.0	8.0			
20		21.1	18.6	8.2	22.4	18.3	8.3	23.6	18.6	8.3	24.8	19.8	8.4	26.0	22.4	8.3	27.3	26.7	8.4	28.5	28.5	8.4	29.7	29.7	8.5			
25		20.5	18.0	8.6	21.7	17.8	8.7	22.9	18.1	8.8	24.1	19.3	8.8	25.4	21.9	8.8	26.6	26.2	8.9	27.8	27.8	8.9	29.0	29.0	9.0			

### OPA 560 at Minimum Capacity (2600 l/s)

Air on D.B. °C		Outdoor coil entering air temperature °C DB																										
		- 5			- 3			- 1			1			3			5			7			9					
		G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI	G	N	PI
15		18.1	15.9	7.3	19.1	15.7	7.4	20.2	15.9	7.4	21.2	16.9	7.4	22.2	19.1	7.4	23.3	22.8	7.4	24.3	24.3	7.5	25.3	25.3	7.5			
20		17.8	15.7	7.7	18.9	15.5	7.7	19.9	15.7	7.8	20.9	16.7	7.8	22.0	18.9	7.8	23.0	22.6	7.9	24.0	24.0	7.9	25.1	25.1	7.9			
25		17.3	15.2	8.1	18.3	15.0	8.2	19.3	15.3	8.3	20.4	16.3	8.3	21.4	18.5	8.3	22.4	22.1	8.3	23.5	23.5	8.4	24.5	24.5	8.4			

## Indoor Air Flow Correction Factors at nominal conditions

Indoor Air Flow (%)

	-20	-10	Rated	+10
Total Capacity	0.95	0.975	1.0	1.025
Sensible Capacity	0.90	0.950	1.0	1.050

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## Auckland

### Head Office

38 Tidal Rd, Mangere, Auckland  
Private Bag 93303, Otahuhu  
New Zealand

**Email:** sales@temperzone.co.nz

**Phone:** (09) 279 5250

**Fax:** (09) 275 5637

## Sydney

### Head Office

14 Carnegie Place, Blacktown  
NSW 2148  
PO Box 8064, Seven Hills West  
NSW 2147, Australia

**Email:** sales@temperzone.com.au

**Phone:** (02) 8822 5700

**Fax:** (02) 8822 5711

## Newcastle

**Phone:** (02) 4692 1155

**Fax:** (02) 4961 5101

## Launceston

**Phone:** (03) 6331 4209

**Fax:** (03) 6333 0224

## Wellington

**Phone:** (04) 569 3262

**Fax:** (04) 566 6249

## Adelaide

**Phone:** (08) 8115 - 2111

**Fax:** (08) 8115 2118

## Singapore

**Phone:** +65 6733 4292

**Fax:** +65 6235 7180

## Christchurch

**Phone:** (03) 379 3216

**Fax:** (03) 379 5956

## Melbourne

**Phone:** (03) 8769 7600

**Fax:** (03) 8769 7601

## Brisbane

**Phone:** (07) 3308 8333

**Fax:** (07) 3308 8330

## Perth

**Phone:** (08) 9314 3844

**Fax:** (08) 9314 3855

