



# Ducted Packaged Units


## Part Load Data

---

OPA 820 Econex R32


**Cooling Capacity**  
11 kW – 84 kW

**Heating Capacity**  
10 kW – 87 kW

## Cooling Capacity (kW)

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

Nominal Air Flow: **4 400 l/s**

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

### OPA 820 Econex @Maximum capacity (4 400 l/s)

Indoor coil  
 E.A.T.

Outdoor coil Entering Air Temperature °C DB

D.B. °C	W.B. °C	20			25			30			35			40			45			50		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
20	14	80.2	58.2	19.8	77.8	57.9	21.7	75.2	57.3	23.7	72.4	56.5	25.9	66.8	54.1	25.4	49.4	40.6	21.7	46.4	38.9	23.8
	15	83.2	52.9	19.9	80.7	52.4	21.8	78.0	51.7	23.9	75.1	50.8	26.1	69.3	48.6	25.6	51.1	36.3	21.9	48.1	34.7	24.1
	16	86.4	46.9	20.0	83.8	46.3	22.0	81.0	45.5	24.1	77.9	44.4	26.3	71.9	42.4	25.9	53.0	31.5	22.2	49.8	30.0	24.3
	17	89.9	40.2	20.1	87.2	39.3	22.1	84.2	38.3	24.3	81.0	37.2	26.6	74.7	35.5	26.2	55.0	26.1	22.4	51.7	24.7	24.6
22	16	85.3	58.7	20.0	82.7	58.3	21.9	79.9	57.7	24.0	76.9	56.8	26.3	70.9	54.4	25.8	52.3	40.7	22.1	49.2	39.0	24.2
	17	88.3	53.2	20.1	85.6	52.7	22.1	82.7	52.0	24.2	79.6	51.0	26.5	73.4	48.7	26.0	54.1	36.4	22.3	50.8	34.7	24.5
	18	91.5	47.1	20.2	88.7	46.4	22.2	85.7	45.5	24.4	82.4	44.4	26.7	76.0	42.4	26.3	55.9	31.5	22.5	52.6	29.9	24.8
	19	94.9	40.2	20.3	92.0	39.3	22.4	88.8	38.3	24.6	85.4	37.1	27.0	78.7	35.4	26.5	57.9	26.0	22.7	54.4	24.5	25.0
24	16	85.0	68.7	20.0	82.4	68.5	21.9	79.7	68.0	24.0	76.7	67.2	26.2	70.7	64.4	25.8	52.2	48.5	22.1	49.0	46.5	24.2
	18	90.4	59.2	20.2	87.7	58.8	22.2	84.7	58.1	24.3	81.5	57.1	26.6	75.1	54.7	26.2	55.3	40.9	22.4	52.0	39.2	24.7
	20	96.6	47.2	20.4	93.7	46.4	22.4	90.5	45.5	24.7	87.0	44.4	27.1	80.2	42.4	26.7	59.0	31.4	22.8	55.4	29.8	25.2
	21	100.0	40.1	20.5	96.9	39.2	22.6	93.6	38.1	24.9	90.0	36.9	27.3	82.9	35.2	26.9	61.0	25.9	23.1	57.2	24.4	25.4
26	17	87.8	73.7	20.1	85.2	73.6	22.1	82.3	73.2	24.2	79.2	72.4	26.5	73.0	69.4	26.0	53.8	51.5	22.3	50.6	48.3	24.5
	19	93.0	64.9	20.2	90.1	64.5	22.3	87.1	63.9	24.5	83.8	63.0	26.8	77.2	60.3	26.4	56.8	45.2	22.6	53.4	43.3	24.9
	20	95.8	59.7	20.3	92.8	59.2	22.4	89.7	58.5	24.6	86.3	57.4	27.0	79.5	55.0	26.6	58.5	41.1	22.8	54.9	39.3	25.1
	22	101.9	47.3	20.5	98.8	46.5	22.7	95.4	45.5	25.0	91.7	44.3	27.4	84.5	42.3	27.0	62.1	31.3	23.2	58.3	29.7	25.6
27	18	90.5	74.2	20.2	87.8	74.1	22.2	84.8	73.7	24.3	81.6	72.9	26.7	75.2	69.8	26.2	55.4	52.6	22.4	52.1	49.7	24.7
	19	93.1	69.9	20.2	90.2	69.7	22.3	87.2	69.1	24.5	83.8	68.2	26.8	77.3	65.4	26.4	56.9	49.1	22.6	53.4	47.2	24.9
	20	95.7	65.2	20.3	92.8	64.8	22.4	89.6	64.2	24.6	83.0	61.8	24.2	79.4	60.5	26.6	58.4	45.4	22.8	54.9	43.5	25.1
	22	101.4	53.9	20.5	98.3	53.3	22.6	95.0	52.4	24.9	87.9	50.4	24.5	84.1	49.1	27.0	61.8	36.5	23.1	58.1	34.8	25.5
28	18	90.9	78.7	20.2	88.2	78.6	22.2	85.2	78.3	24.4	78.9	75.5	23.9	75.5	73.2	26.2	55.6	53.3	22.5	52.3	49.9	24.7
	20	95.8	70.3	20.3	92.9	70.0	22.4	89.7	69.5	24.6	83.1	67.0	24.2	79.5	65.7	26.6	58.5	49.3	22.8	54.9	47.3	25.1
	22	101.2	60.1	20.5	98.1	59.6	22.6	94.8	58.8	24.9	87.7	56.6	24.5	83.9	55.2	27.0	61.7	41.3	23.1	57.9	39.4	25.5
	24	107.3	47.4	20.6	104.0	46.5	22.9	100.4	45.5	25.2	92.9	43.7	24.9	88.9	42.3	27.4	65.3	31.3	23.5	61.3	29.7	26.0
30	19	94.3	83.6	20.3	91.4	83.6	22.3	88.3	83.3	24.5	81.8	79.4	24.1	78.2	75.9	26.5	57.6	55.3	22.7	54.1	51.8	25.0
	21	98.9	75.6	20.4	95.9	75.4	22.5	92.6	74.9	24.8	85.7	72.3	24.4	82.0	71.0	26.8	60.3	53.3	23.0	56.6	51.3	25.4
	23	104.0	66.0	20.6	100.8	65.6	22.7	97.4	64.9	25.1	90.1	62.5	24.7	86.2	61.1	27.2	63.4	45.8	23.3	59.5	43.8	25.7
	25	109.7	54.2	20.7	106.4	53.5	22.9	102.7	52.6	25.3	95.0	50.6	25.0	90.9	49.2	27.5	66.8	36.6	23.6	62.7	34.8	26.1
32	21	100.0	84.8	20.5	96.9	84.9	22.6	93.6	84.5	24.9	86.6	81.5	24.5	82.9	79.9	26.9	61.0	58.6	23.1	57.2	54.9	25.4
	23	104.6	76.5	20.6	101.4	76.3	22.8	97.9	75.8	25.1	90.6	73.1	24.7	86.7	71.7	27.2	63.7	53.9	23.3	59.8	51.8	25.8
	25	109.7	66.5	20.7	106.4	66.0	22.9	102.7	65.3	25.3	95.0	62.9	25.0	90.9	61.5	27.5	66.8	46.1	23.6	62.7	44.1	26.1
	26	112.5	60.7	20.8	109.1	60.1	23.0	105.3	59.3	25.5	97.4	57.1	25.1	93.1	55.7	27.7	68.5	41.6	23.8	64.3	39.7	26.3

# 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 Capacity (kW)

Nominal Air Flow: **4 400 l/s**

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

### OPA 820 Econex @Nominal Capacity (4 400 l/s)

Indoor coil			Outdoor coil Entering Air Temperature °C DB																				
E.A.T.			20			25			30			35			40			45			50		
D.B. °C	W.B. °C		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
20	14		77.2	56.9	17.7	74.9	56.6	19.4	72.5	56.1	21.2	69.8	55.3	23.2	66.8	54.1	25.4	49.4	40.6	21.7	46.4	38.9	23.8
	15		80.1	51.9	17.7	77.8	51.4	19.5	75.2	50.7	21.4	72.4	49.8	23.4	69.3	48.6	25.6	51.1	36.3	21.9	48.1	34.7	24.1
	16		83.2	46.2	17.8	80.7	45.5	19.6	78.0	44.7	21.6	75.1	43.7	23.7	71.9	42.4	25.9	53.0	31.5	22.2	49.8	30.0	24.3
	17		86.5	39.6	17.9	83.9	38.8	19.8	81.1	37.9	21.7	78.0	36.8	23.9	74.7	35.5	26.2	55.0	26.1	22.4	51.7	24.7	24.6
22	16		82.1	57.5	17.8	79.6	57.1	19.6	77.0	56.5	21.5	74.1	55.6	23.6	70.9	54.4	25.8	52.3	40.7	22.1	49.2	39.0	24.2
	17		85.0	52.2	17.9	82.4	51.7	19.7	79.7	51.0	21.7	76.7	50.0	23.8	73.4	48.7	26.0	54.1	36.4	22.3	50.8	34.7	24.5
	18		88.0	46.4	18.0	85.4	45.7	19.8	82.5	44.8	21.8	79.4	43.7	24.0	76.0	42.4	26.3	55.9	31.5	22.5	52.6	29.9	24.8
	19		91.3	39.7	18.1	88.5	38.8	20.0	85.5	37.8	22.0	82.3	36.7	24.2	78.7	35.4	26.5	57.9	26.0	22.7	54.4	24.5	25.0
24	16		81.8	67.0	17.8	79.4	66.9	19.6	76.8	66.4	21.5	73.9	65.6	23.6	70.7	64.4	25.8	52.2	48.5	22.1	49.0	46.5	24.2
	18		87.0	58.0	17.9	84.4	57.6	19.8	81.6	56.9	21.8	78.5	56.0	23.9	75.1	54.7	26.2	55.3	40.9	22.4	52.0	39.2	24.7
	20		93.0	46.5	18.1	90.1	45.7	20.0	87.1	44.8	22.1	83.8	43.7	24.3	80.2	42.4	26.7	59.0	31.4	22.8	55.4	29.8	25.2
	21		96.2	39.7	18.2	93.2	38.8	20.1	90.1	37.7	22.2	86.6	36.5	24.5	82.9	35.2	26.9	61.0	25.9	23.1	57.2	24.4	25.4
26	17		84.6	71.9	17.9	82.0	71.8	19.7	79.3	71.4	21.6	76.3	70.6	23.7	73.0	69.4	26.0	53.8	51.5	22.3	50.6	48.3	24.5
	19		89.4	63.4	18.0	86.8	63.1	19.9	83.8	62.5	21.9	80.7	61.6	24.1	77.2	60.3	26.4	56.8	45.2	22.6	53.4	43.3	24.9
	20		92.1	58.5	18.1	89.3	58.0	20.0	86.3	57.3	22.0	83.0	56.3	24.2	79.5	55.0	26.6	58.5	41.1	22.8	54.9	39.3	25.1
	22		98.0	46.6	18.2	95.0	45.8	20.2	91.8	44.8	22.3	88.3	43.7	24.6	84.5	42.3	27.0	62.1	31.3	23.2	58.3	29.7	25.6
27	18		87.1	72.4	17.9	84.5	72.3	19.8	81.7	71.9	21.8	78.6	71.1	23.9	75.2	69.8	26.2	55.4	52.6	22.4	52.1	49.7	24.7
	19		89.5	68.3	18.0	86.8	68.1	19.9	83.9	67.5	21.9	80.7	66.7	24.1	77.3	65.4	26.4	56.9	49.1	22.6	53.4	47.2	24.9
	20		92.0	63.8	18.1	89.3	63.4	20.0	86.2	62.8	22.0	83.0	61.8	24.2	79.4	60.5	26.6	58.4	45.4	22.8	54.9	43.5	25.1
	22		97.6	53.0	18.2	94.6	52.4	20.2	91.4	51.5	22.3	87.9	50.4	24.5	84.1	49.1	27.0	61.8	36.5	23.1	58.1	34.8	25.5
28	18		87.5	76.7	18.0	84.9	76.7	19.8	82.0	76.3	21.8	78.9	75.5	23.9	75.5	73.2	26.2	55.6	53.3	22.5	52.3	49.9	24.7
	20		92.2	68.7	18.1	89.4	68.4	20.0	86.4	67.9	22.0	83.1	67.0	24.2	79.5	65.7	26.6	58.5	49.3	22.8	54.9	47.3	25.1
	22		97.3	58.9	18.2	94.4	58.4	20.2	91.2	57.6	22.3	87.7	56.6	24.5	83.9	55.2	27.0	61.7	41.3	23.1	57.9	39.4	25.5
	24		103.2	46.7	18.3	100.0	45.9	20.3	96.6	44.9	22.5	92.9	43.7	24.9	88.9	42.3	27.4	65.3	31.3	23.5	61.3	29.7	26.0
30	19		90.7	81.4	18.0	88.0	81.5	19.9	85.0	81.2	22.0	81.8	79.4	24.1	78.2	75.9	26.5	57.6	55.3	22.7	54.1	51.8	25.0
	21		95.1	73.8	18.1	92.2	73.7	20.1	89.1	73.2	22.2	85.7	72.3	24.4	82.0	71.0	26.8	60.3	53.3	23.0	56.6	51.3	25.4
	23		100.0	64.6	18.2	97.0	64.2	20.2	93.7	63.5	22.4	90.1	62.5	24.7	86.2	61.1	27.2	63.4	45.8	23.3	59.5	43.8	25.7
	25		105.5	53.3	18.3	102.3	52.7	20.4	98.8	51.7	22.6	95.0	50.6	25.0	90.9	49.2	27.5	66.8	36.6	23.6	62.7	34.8	26.1
32	21		96.2	82.7	18.2	93.2	82.7	20.1	90.1	82.4	22.2	86.6	81.5	24.5	82.9	79.9	26.9	61.0	58.6	23.1	57.2	54.9	25.4
	23		100.6	74.7	18.3	97.5	74.5	20.3	94.2	74.0	22.4	90.6	73.1	24.7	86.7	71.7	27.2	63.7	53.9	23.3	59.8	51.8	25.8
	25		105.5	65.1	18.3	102.3	64.7	20.4	98.8	64.0	22.6	95.0	62.9	25.0	90.9	61.5	27.5	66.8	46.1	23.6	62.7	44.1	26.1
	26		108.2	59.6	18.4	104.9	59.0	20.5	101.3	58.2	22.7	97.4	57.1	25.1	93.1	55.7	27.7	68.5	41.6	23.8	64.3	39.7	26.3

# 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: **4 400 l/s**

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

### OPA 820 Econex @Maximum less 25% (4 400 l/s)

Indoor coil  
E.A.T.

Outdoor coil Entering Air Temperature °C DB

D.B. °C	W.B. °C	20			25			30			35			40			45			50		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
20	14	60.4	44.4	13.5	58.6	44.1	14.9	56.6	43.6	16.4	54.4	42.9	18.0	52.0	41.9	19.8	49.4	40.6	21.7	46.4	38.9	23.8
	15	62.7	40.5	13.6	60.8	40.0	15.0	58.7	39.5	16.5	56.4	38.7	18.2	53.9	37.6	20.0	51.1	36.3	21.9	48.1	34.7	24.1
	16	65.1	36.0	13.6	63.1	35.4	15.1	60.9	34.8	16.6	58.5	33.9	18.3	55.9	32.8	20.2	53.0	31.5	22.2	49.8	30.0	24.3
	17	67.7	30.9	13.6	65.6	30.2	15.1	63.3	29.4	16.7	60.8	28.5	18.5	58.0	27.4	20.3	55.0	26.1	22.4	51.7	24.7	24.6
22	16	64.2	44.8	13.6	62.3	44.5	15.0	60.1	44.0	16.6	57.8	43.2	18.3	55.2	42.1	20.1	52.3	40.7	22.1	49.2	39.0	24.2
	17	66.5	40.7	13.6	64.4	40.3	15.1	62.2	39.6	16.7	59.7	38.8	18.4	57.0	37.7	20.3	54.1	36.4	22.3	50.8	34.7	24.5
	18	68.8	36.2	13.7	66.7	35.6	15.2	64.4	34.8	16.8	61.8	33.9	18.5	59.0	32.8	20.4	55.9	31.5	22.5	52.6	29.9	24.8
	19	71.4	31.0	13.7	69.1	30.2	15.2	66.7	29.4	16.9	64.1	28.4	18.7	61.1	27.3	20.6	57.9	26.0	22.7	54.4	24.5	25.0
24	16	64.0	52.3	13.6	62.1	52.2	15.0	59.9	51.7	16.6	57.6	51.0	18.3	55.0	49.9	20.1	52.2	48.5	22.1	49.0	46.5	24.2
	18	68.1	45.3	13.6	66.0	44.9	15.1	63.7	44.3	16.8	61.2	43.4	18.5	58.4	42.3	20.4	55.3	40.9	22.4	52.0	39.2	24.7
	20	72.7	36.3	13.7	70.4	35.6	15.3	68.0	34.9	16.9	65.2	33.9	18.7	62.3	32.8	20.7	59.0	31.4	22.8	55.4	29.8	25.2
	21	75.2	31.0	13.7	72.8	30.2	15.3	70.3	29.4	17.0	67.4	28.3	18.9	64.4	27.2	20.9	61.0	25.9	23.1	57.2	24.4	25.4
26	17	66.1	56.1	13.6	64.1	56.0	15.1	61.9	55.6	16.7	59.5	54.9	18.4	56.8	53.8	20.2	53.8	51.5	22.3	50.6	48.3	24.5
	19	70.0	49.5	13.7	67.8	49.2	15.2	65.4	48.7	16.8	62.8	47.8	18.6	60.0	46.7	20.5	56.8	45.2	22.6	53.4	43.3	24.9
	20	72.0	45.6	13.7	69.8	45.2	15.2	67.3	44.6	16.9	64.7	43.7	18.7	61.7	42.5	20.7	58.5	41.1	22.8	54.9	39.3	25.1
	22	76.6	36.4	13.7	74.2	35.7	15.3	71.6	34.9	17.1	68.7	33.9	18.9	65.6	32.7	21.0	62.1	31.3	23.2	58.3	29.7	25.6
27	18	68.1	56.6	13.6	66.0	56.4	15.1	63.7	56.0	16.8	61.2	55.2	18.5	58.4	54.1	20.4	55.4	52.6	22.4	52.1	49.7	24.7
	19	70.0	53.3	13.7	67.9	53.1	15.2	65.5	52.6	16.8	62.9	51.8	18.6	60.0	50.6	20.5	56.9	49.1	22.6	53.4	47.2	24.9
	20	72.0	49.8	13.7	69.7	49.5	15.2	67.3	48.9	16.9	64.6	48.0	18.7	61.7	46.9	20.7	58.4	45.4	22.8	54.9	43.5	25.1
	22	76.3	41.4	13.7	73.9	40.8	15.3	71.3	40.1	17.1	68.4	39.1	18.9	65.3	38.0	20.9	61.8	36.5	23.1	58.1	34.8	25.5
28	18	68.4	59.9	13.6	66.3	59.8	15.2	64.0	59.4	16.8	61.5	58.7	18.5	58.7	56.4	20.4	55.6	53.3	22.5	52.3	49.9	24.7
	20	72.1	53.6	13.7	69.8	53.4	15.2	67.4	52.9	16.9	64.7	52.0	18.7	61.7	50.9	20.7	58.5	49.3	22.8	54.9	47.3	25.1
	22	76.1	46.0	13.7	73.7	45.5	15.3	71.1	44.9	17.1	68.3	44.0	18.9	65.1	42.8	20.9	61.7	41.3	23.1	57.9	39.4	25.5
	24	80.7	36.5	13.8	78.1	35.8	15.4	75.4	35.0	17.2	72.3	34.0	19.1	69.0	32.8	21.2	65.3	31.3	23.5	61.3	29.7	26.0
30	19	70.9	63.6	13.7	68.7	63.6	15.2	66.3	63.2	16.9	63.7	61.4	18.6	60.8	58.5	20.6	57.6	55.3	22.7	54.1	51.8	25.0
	21	74.4	57.7	13.7	72.1	57.5	15.3	69.5	57.0	17.0	66.7	56.2	18.8	63.7	55.0	20.8	60.3	53.3	23.0	56.6	51.3	25.4
	23	78.2	50.5	13.7	75.8	50.1	15.4	73.1	49.5	17.1	70.1	48.5	19.0	66.9	47.3	21.1	63.4	45.8	23.3	59.5	43.8	25.7
	25	82.5	41.7	13.8	79.9	41.1	15.5	77.1	40.3	17.3	73.9	39.3	19.2	70.5	38.1	21.3	66.8	36.6	23.6	62.7	34.8	26.1
32	21	75.2	64.6	13.7	72.8	64.6	15.3	70.3	64.1	17.0	67.4	63.4	18.9	64.4	61.9	20.9	61.0	58.6	23.1	57.2	54.9	25.4
	23	78.7	58.4	13.7	76.2	58.2	15.4	73.5	57.7	17.1	70.5	56.8	19.0	67.3	55.6	21.1	63.7	53.9	23.3	59.8	51.8	25.8
	25	82.5	50.9	13.8	79.9	50.5	15.5	77.1	49.9	17.3	73.9	48.9	19.2	70.5	47.7	21.3	66.8	46.1	23.6	62.7	44.1	26.1
	26	84.6	46.6	13.8	81.9	46.1	15.5	79.0	45.4	17.3	75.8	44.4	19.3	72.3	43.1	21.5	68.5	41.6	23.8	64.3	39.7	26.3

# 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: **4 400 l/s**

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

### OPA 820 Econex @Maximum less 50% (4 400 l/s)

Indoor coil  
E.A.T.

Outdoor coil Entering Air Temperature °C DB

D.B. °C	W.B. °C	20			25			30			35			40			45			50		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
20	14	33.6	23.0	11.1	32.8	23.0	12.0	31.8	22.9	12.9	30.8	22.7	13.9	25.1	18.7	11.7	17.3	12.5	8.8	16.6	12.3	9.5
	15	34.9	20.8	11.2	34.0	20.7	12.1	33.0	20.5	13.0	32.0	20.3	14.0	26.1	16.6	11.8	17.9	11.0	8.8	17.1	10.7	9.6
	16	36.3	18.3	11.2	35.3	18.1	12.2	34.3	17.8	13.1	33.2	17.5	14.1	27.0	14.3	11.9	18.5	9.3	8.9	17.7	9.0	9.7
	17	37.7	15.4	11.3	36.7	15.1	12.2	35.6	14.8	13.2	34.5	14.5	14.3	28.0	11.7	11.9	19.2	7.4	8.9	18.4	7.1	9.7
22	16	35.8	23.2	11.2	34.8	23.2	12.1	33.8	23.0	13.1	32.7	22.8	14.1	26.7	18.8	11.8	18.3	12.6	8.9	17.5	12.3	9.6
	17	37.0	20.9	11.3	36.0	20.8	12.2	35.0	20.6	13.2	33.9	20.3	14.2	27.5	16.6	11.9	18.9	11.0	8.9	18.1	10.7	9.7
	18	38.3	18.3	11.3	37.3	18.1	12.3	36.2	17.9	13.2	35.1	17.5	14.3	28.5	14.3	12.0	19.5	9.3	8.9	18.7	9.0	9.7
	19	39.7	15.4	11.4	38.7	15.1	12.3	37.6	14.8	13.3	36.3	14.4	14.4	29.5	11.6	12.0	20.1	7.4	9.0	19.3	7.0	9.8
24	16	35.7	27.4	11.2	34.7	27.4	12.1	33.7	27.4	13.1	32.7	27.2	14.1	26.6	22.6	11.8	18.2	15.3	8.9	17.5	15.0	9.6
	18	37.9	23.4	11.3	36.9	23.3	12.2	35.8	23.2	13.2	34.7	22.9	14.3	28.2	18.9	11.9	19.3	12.6	8.9	18.5	12.3	9.7
	20	40.5	18.3	11.4	39.4	18.1	12.4	38.2	17.8	13.4	37.0	17.5	14.5	30.0	14.2	12.1	20.5	9.2	9.0	19.6	8.9	9.8
	21	41.9	15.4	11.4	40.7	15.1	12.4	39.5	14.7	13.4	38.3	14.3	14.5	31.0	11.5	12.1	21.1	7.3	9.1	20.2	6.9	9.9
26	17	36.8	29.5	11.3	35.9	29.6	12.2	34.8	29.6	13.2	33.7	29.4	14.2	27.4	24.4	11.9	18.8	16.5	8.9	18.0	15.7	9.7
	19	39.0	25.8	11.3	37.9	25.7	12.3	36.8	25.6	13.3	35.6	25.4	14.3	28.9	20.9	12.0	19.8	14.0	9.0	18.9	13.7	9.8
	20	40.1	23.6	11.4	39.1	23.5	12.3	37.9	23.3	13.3	36.7	23.0	14.4	29.7	18.9	12.1	20.3	12.6	9.0	19.5	12.3	9.8
	22	42.7	18.4	11.5	41.5	18.1	12.4	40.3	17.8	13.5	39.0	17.4	14.6	31.5	14.1	12.2	21.5	9.2	9.1	20.6	8.8	9.9
27	18	38.0	29.7	11.3	37.0	29.8	12.2	35.9	29.8	13.2	34.7	29.6	14.3	28.2	24.5	12.0	19.3	16.6	8.9	18.5	16.2	9.7
	19	39.0	27.9	11.3	38.0	27.9	12.3	36.9	27.8	13.3	35.7	27.7	14.4	28.9	22.8	12.0	19.8	15.4	9.0	19.0	15.1	9.8
	20	40.1	25.9	11.4	39.0	25.9	12.3	37.9	25.7	13.3	35.6	24.8	13.6	29.7	21.0	12.1	20.3	14.1	9.0	20.5	14.6	10.1
	22	42.5	21.1	11.5	41.3	21.0	12.4	40.1	20.7	13.5	37.6	19.9	13.8	31.4	16.6	12.2	21.4	10.9	9.1	21.6	11.3	10.2
28	18	38.1	31.5	11.3	37.1	31.7	12.2	36.0	31.7	13.2	33.9	30.7	13.5	28.3	26.0	12.0	19.4	17.1	8.9	19.6	17.2	10.1
	20	40.1	28.0	11.4	39.1	28.0	12.3	37.9	28.0	13.3	35.6	27.0	13.6	29.8	22.9	12.1	20.3	15.4	9.0	20.5	16.0	10.2
	22	42.4	23.7	11.5	41.2	23.6	12.4	40.0	23.4	13.5	37.6	22.5	13.8	31.3	19.0	12.2	21.4	12.6	9.1	21.6	13.0	10.2
	24	44.9	18.4	11.5	43.7	18.1	12.5	42.4	17.8	13.6	39.7	17.0	13.9	33.1	14.1	12.3	22.6	9.1	9.1	22.7	9.3	10.3
30	19	39.5	33.6	11.4	38.5	33.8	12.3	37.3	33.8	13.3	35.1	32.7	13.6	29.3	27.0	12.0	20.0	17.7	9.0	20.2	17.9	10.1
	21	41.4	30.2	11.4	40.3	30.3	12.4	39.1	30.3	13.4	36.7	29.3	13.7	30.7	24.9	12.1	20.9	16.8	9.0	21.1	17.4	10.2
	23	43.5	26.2	11.5	42.4	26.1	12.5	41.1	26.0	13.5	38.6	25.0	13.8	32.2	21.1	12.2	21.9	14.1	9.1	22.1	14.6	10.3
	25	45.9	21.2	11.6	44.6	21.0	12.6	43.3	20.8	13.7	40.6	19.9	14.0	33.8	16.6	12.3	23.1	10.9	9.2	23.2	11.2	10.4
32	21	41.9	34.1	11.4	40.7	34.3	12.4	39.5	34.3	13.4	37.1	33.2	13.7	31.0	28.3	12.1	21.1	18.8	9.1	21.3	19.0	10.2
	23	43.8	30.6	11.5	42.6	30.6	12.5	41.3	30.6	13.5	38.8	29.6	13.9	32.3	25.1	12.2	22.0	16.9	9.1	22.2	17.6	10.3
	25	45.9	26.4	11.6	44.6	26.3	12.6	43.3	26.1	13.7	40.6	25.2	14.0	33.8	21.2	12.3	23.1	14.2	9.2	23.2	14.6	10.4
	26	47.0	23.9	11.6	45.8	23.8	12.6	44.4	23.6	13.7	41.6	22.6	14.0	34.6	19.0	12.4	23.6	12.6	9.2	23.8	13.0	10.4

# 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: **4 400 l/s**

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

### OPA 820 Econex @Minimum capacity (4 400 l/s)

Indoor coil  
 E.A.T.

Outdoor coil Entering Air Temperature °C DB

D.B. °C	W.B. °C	20			25			30			35			40			45			50		
		TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
20	14	10.5	5.7	4.4	10.3	5.8	4.7	10.0	5.7	5.0	9.7	5.7	5.3	17.9	12.8	8.1	17.3	12.5	8.8	16.6	12.3	9.5
	15	10.9	5.1	4.4	10.7	5.0	4.6	10.4	5.0	5.0	10.0	4.9	5.3	18.5	11.3	8.1	17.9	11.0	8.8	17.1	10.7	9.6
	16	21.5	10.1	5.9	11.1	4.2	4.6	10.8	4.2	4.9	10.4	4.1	5.3	19.2	9.6	8.2	18.5	9.3	8.9	17.7	9.0	9.7
	17	22.3	8.4	5.9	11.5	3.3	4.6	11.2	3.2	4.9	10.8	3.1	5.3	19.9	7.7	8.2	19.2	7.4	8.9	18.4	7.1	9.7
22	16	21.2	13.1	5.9	10.9	5.8	4.6	10.6	5.8	4.9	10.3	5.7	5.3	19.0	12.8	8.2	18.3	12.6	8.9	17.5	12.3	9.6
	17	22.0	11.7	5.9	11.3	5.1	4.6	11.0	5.0	4.9	10.6	4.9	5.3	19.6	11.3	8.2	18.9	11.0	8.9	18.1	10.7	9.7
	18	22.7	10.2	5.9	11.7	4.3	4.6	11.4	4.2	4.9	11.0	4.1	5.3	20.2	9.5	8.2	19.5	9.3	8.9	18.7	9.0	9.7
	19	23.5	8.4	5.9	12.2	3.3	4.6	11.8	3.2	4.9	21.7	7.9	7.6	20.9	7.6	8.3	20.1	7.4	9.0	19.3	7.0	9.8
24	16	21.2	15.6	5.9	10.9	7.2	4.6	10.6	7.2	4.9	10.2	7.1	5.3	18.9	15.5	8.2	18.2	15.3	8.9	17.5	15.0	9.6
	18	22.5	13.2	5.9	11.6	5.9	4.6	11.3	5.8	4.9	10.9	5.8	5.3	20.0	12.8	8.2	19.3	12.6	8.9	18.5	12.3	9.7
	20	24.0	10.2	5.9	12.4	4.3	4.6	12.0	4.2	4.9	22.1	9.7	7.6	21.3	9.5	8.3	20.5	9.2	9.0	19.6	8.9	9.8
	21	24.8	8.4	5.9	12.9	3.3	4.6	12.5	3.2	4.9	22.8	7.8	7.6	22.0	7.6	8.3	21.1	7.3	9.1	20.2	6.9	9.9
26	17	21.9	16.8	5.9	11.3	7.9	4.6	10.9	7.8	4.9	10.6	7.8	5.3	19.5	16.8	8.2	18.8	16.5	8.9	18.0	15.7	9.7
	19	23.1	14.6	5.9	11.9	6.7	4.6	11.6	6.6	4.9	11.2	6.5	5.3	20.5	14.3	8.2	19.8	14.0	9.0	18.9	13.7	9.8
	20	23.8	13.3	5.9	12.3	6.0	4.6	11.9	5.9	4.9	21.9	13.0	7.6	21.1	12.8	8.3	20.3	12.6	9.0	19.5	12.3	9.8
	22	25.2	10.2	5.8	13.1	4.3	4.5	12.7	4.2	4.9	23.2	9.7	7.6	22.4	9.4	8.3	21.5	9.2	9.1	20.6	8.8	9.9
27	18	22.5	16.9	5.9	11.6	7.9	4.6	11.3	7.9	4.9	10.9	7.9	5.3	20.0	16.9	8.2	19.3	16.6	8.9	18.5	16.2	9.7
	19	23.1	15.8	5.9	11.9	7.4	4.6	11.6	7.3	4.9	11.2	7.2	5.3	20.6	15.6	8.2	19.8	15.4	9.0	19.0	15.1	9.8
	20	23.7	14.6	5.9	12.3	6.7	4.6	11.9	6.7	4.9	21.8	14.5	7.6	21.1	14.3	8.3	20.3	14.1	9.0	20.5	14.6	10.1
	22	25.1	11.8	5.9	13.1	5.2	4.5	12.7	5.1	4.9	23.1	11.5	7.6	22.3	11.2	8.3	21.4	10.9	9.1	21.6	11.3	10.2
28	18	22.6	18.0	5.9	11.7	8.5	4.6	11.3	8.5	4.9	10.9	8.5	5.3	20.1	17.8	8.2	19.4	17.1	8.9	19.6	17.2	10.1
	20	23.8	15.9	5.9	12.3	7.4	4.6	11.9	7.4	4.9	21.9	15.9	7.6	21.1	15.7	8.3	20.3	15.4	9.0	20.5	16.0	10.2
	22	25.1	13.4	5.9	13.0	6.0	4.6	12.6	6.0	4.9	23.0	13.1	7.6	22.2	12.9	8.3	21.4	12.6	9.1	21.6	13.0	10.2
	24	26.5	10.2	5.8	13.8	4.3	4.5	13.4	4.2	4.9	24.3	9.7	7.6	23.5	9.4	8.4	22.6	9.1	9.1	22.7	9.3	10.3
30	19	23.4	19.2	5.9	12.1	9.2	4.6	11.7	9.2	4.9	21.5	19.2	7.6	20.8	18.5	8.3	20.0	17.7	9.0	20.2	17.9	10.1
	21	24.5	17.2	5.9	12.7	8.1	4.6	12.3	8.1	4.9	22.5	17.2	7.6	21.8	17.1	8.3	20.9	16.8	9.0	21.1	17.4	10.2
	23	25.7	14.8	5.8	13.4	6.9	4.5	13.0	6.8	4.9	23.6	14.6	7.6	22.8	14.4	8.3	21.9	14.1	9.1	22.1	14.6	10.3
	25	27.1	11.9	5.8	14.2	5.3	4.5	13.7	5.2	4.9	24.9	11.5	7.7	24.0	11.2	8.4	23.1	10.9	9.2	23.2	11.2	10.4
32	21	24.8	19.5	5.9	12.9	9.4	4.6	12.5	9.4	4.9	22.8	19.6	7.6	22.0	19.5	8.3	21.1	18.8	9.1	21.3	19.0	10.2
	23	25.9	17.4	5.8	13.5	8.3	4.5	13.1	8.2	4.9	23.8	17.4	7.6	22.9	17.2	8.3	22.0	16.9	9.1	22.2	17.6	10.3
	25	27.1	14.9	5.8	14.2	6.9	4.5	13.7	6.9	4.9	24.9	14.7	7.7	24.0	14.5	8.4	23.1	14.2	9.2	23.2	14.6	10.4
	26	27.8	13.5	5.8	14.6	6.2	4.5	14.1	6.1	4.8	25.5	13.1	7.7	24.6	12.9	8.4	23.6	12.6	9.2	23.8	13.0	10.4

## Indoor Air Flow Correction Factors @ nominal conditions

Cooling

Indoor Air Flow (%)

	-20	-10	Rated	+10
Total Capacity	0.950	0.975	1.000	1.025
Sensible Capacity	0.890	0.950	1.000	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)

79.1 = Nominal Capacity (kW)  
 Nominal Air Flow: **4 400 l/s**

### OPA 820 Econex at Maximum Capacity (4 400 l/s)

Air on		Outdoor coil entering air temperature °C DB																											
D.B. °C	- 10			- 5			0			5			7			10			15			20			25				
	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	G	N
10	52.5	33.0	20.1	65.4	45.8	24.8	75.6	58.9	25.4	81.1	80.4	25.7	83.7	83.7	25.9	90.8	90.8	26.2	93.8	93.8	26.3	95.8	95.8	26.3	97.8	97.8	26.4		
15	51.1	32.1	21.1	65.5	45.9	26.1	76.7	59.0	26.8	82.2	81.5	27.1	85.4	85.4	27.4	92.4	92.4	27.7	95.4	95.4	27.8	97.5	97.5	27.9	100.2	100.2	27.3		
20	50.2	31.6	22.2	64.6	45.2	27.5	77.3	58.3	28.3	82.9	81.6	28.7	87.0	87.0	29.0	85.5	85.5	24.1	88.3	88.3	24.2	90.1	90.1	24.2	92.8	92.8	23.5		
25	48.3	30.4	23.4	56.8	41.3	24.1	70.0	51.5	24.7	75.3	72.7	25.0	80.4	80.4	25.2	86.9	86.9	25.6	89.6	89.6	25.7	91.5	91.5	25.7	94.2	94.2	25.0		

### OPA 820 Econex at Nominal Capacity (4 400 l/s)

Air on		Outdoor coil entering air temperature °C DB																											
D.B. °C	- 10			- 5			0			5			7			10			15			20			25				
	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	G	N
10	52.5	33.0	20.1	59.4	43.2	20.6	68.6	53.5	20.9	73.9	73.2	21.2	76.2	76.2	21.3	82.6	82.6	21.5	85.3	85.3	21.5	87.2	87.2	21.5	89.0	89.0	21.5		
15	51.1	32.1	21.1	59.6	43.3	21.6	69.6	53.7	22.1	74.9	74.1	22.4	77.6	77.6	22.5	84.1	84.1	22.7	86.8	86.8	22.8	88.7	88.7	22.8	91.3	91.3	22.2		
20	50.2	31.6	22.2	58.7	42.6	22.8	70.0	53.0	23.3	75.3	74.2	23.6	<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">79.1</span>	79.1	23.8	85.5	85.5	24.1	88.3	88.3	24.2	90.1	90.1	24.2	92.8	92.8	23.5		
25	48.3	30.4	23.4	56.8	41.3	24.1	70.0	51.5	24.7	75.3	72.7	25.0	80.4	80.4	25.2	86.9	86.9	25.6	89.6	89.6	25.7	91.5	91.5	25.7	94.2	94.2	25.0		

### OPA 820 Econex at Nominal less 25% (4 400 l/s)

Air on		Outdoor coil entering air temperature °C DB																											
D.B. °C	- 10			- 5			0			5			7			10			15			20			25				
	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	G	N
10	49.5	30.9	19.1	56.1	40.6	19.5	64.7	50.5	19.8	69.8	69.1	20.0	71.8	71.8	20.1	77.9	77.9	20.3	80.5	80.5	20.3	82.3	82.3	20.3	84.0	84.0	20.3		
15	48.2	30.1	20.1	56.2	40.7	20.5	65.5	50.6	20.9	70.7	69.9	21.2	73.2	73.2	21.3	79.3	79.3	21.5	81.9	81.9	21.5	83.7	83.7	21.5	86.2	86.2	20.9		
20	47.3	29.6	21.1	55.4	40.1	21.6	65.9	50.0	22.1	71.1	70.0	22.4	74.6	74.6	22.5	80.7	80.7	22.8	83.3	83.3	22.8	85.0	85.0	22.9	87.6	87.6	22.2		
25	45.6	28.5	22.2	53.6	38.8	22.8	65.7	48.6	23.3	70.9	68.6	23.7	75.8	75.8	23.9	81.9	81.9	24.1	84.5	84.5	24.2	86.3	86.3	24.3	88.9	88.9	23.5		

### OPA 820 Econex at Nominal less 50% (4 400 l/s)

Air on		Outdoor coil entering air temperature °C DB																											
D.B. °C	- 10			- 5			0			5			7			10			15			20			25				
	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	G	N
10	27.6	19.3	10.9	37.2	27.9	15.0	43.4	33.5	15.4	44.9	44.9	15.5	47.4	47.4	15.7	51.3	51.3	15.9	53.0	53.0	15.9	54.1	54.1	16.0	55.2	55.2	16.0		
15	26.9	18.9	11.4	37.3	28.0	15.7	44.4	33.6	16.1	46.0	46.0	16.3	48.5	48.5	16.5	52.4	52.4	16.7	54.1	54.1	16.8	55.2	55.2	16.8	56.3	56.3	16.8		
20	26.5	18.5	11.9	36.8	27.6	16.5	45.5	33.2	17.0	47.0	46.5	17.2	49.5	49.5	17.4	45.1	45.1	12.7	46.5	46.5	12.7	47.4	47.4	12.7	48.4	48.4	12.7		
25	25.5	17.8	12.5	30.0	22.5	12.7	39.1	27.2	13.0	40.4	38.4	13.1	42.6	42.6	13.2	45.9	45.9	13.3	47.3	47.3	13.3	48.3	48.3	13.4	49.2	49.2	13.4		

### OPA 820 Econex at Minimum Capacity (4 400 l/s)

Air on		Outdoor coil entering air temperature °C DB																											
D.B. °C	- 10			- 5			0			5			7			10			15			20			25				
	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	G	N
10	6.9	4.9	5.2	7.5	5.6	5.2	8.8	8.8	5.2	9.1	9.1	5.2	9.5	9.5	5.2	10.3	10.3	5.2	10.6	10.6	5.2	10.9	10.9	5.2	11.1	11.1	5.1		
15	6.5	4.5	5.3	7.5	5.6	5.3	9.0	9.0	5.3	9.3	9.3	5.3	9.8	9.8	5.3	10.5	10.5	5.3	10.9	10.9	5.3	11.1	11.1	5.3	11.3	11.3	5.3		
20	6.3	4.4	5.4	7.4	5.6	5.5	9.2	9.2	5.5	9.5	9.4	5.5	10.0	10.0	5.5	10.8	10.8	5.4	11.1	11.1	5.4	11.4	11.4	5.4	11.6	11.6	5.4		
25	6.1	4.3	5.6	7.2	5.4	5.6	9.4	9.4	5.6	9.7	9.2	5.6	10.2	10.2	5.6	11.0	11.0	5.6	11.4	11.4	5.6	11.6	11.6	5.6	11.8	11.8	5.6		

[www.temperzone.com](http://www.temperzone.com)

## Auckland

### Head Office

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

**Phone:** (09) 279 5250

**Email:** [sales@temperzone.co.nz](mailto:sales@temperzone.co.nz)

## Sydney

### Head Office

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

**Phone:** (02) 8822 5700

**Email:** [sales@temperzone.com.au](mailto:sales@temperzone.com.au)

## Newcastle

**Phone:** (02) 4692 1155

**Email:** [sales@mcintoshair.com.au](mailto:sales@mcintoshair.com.au)

## Launceston

**Phone:** (03) 6331 4209

**Email:** [info@hvac-supplies.net](mailto:info@hvac-supplies.net)

## Hamilton

**Phone:** (07) 839 2705

**Email:** [tzhamilton@temperzone.com](mailto:tzhamilton@temperzone.com)

## Adelaide

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

**Email:** [sasales@temperzone.com.au](mailto:sasales@temperzone.com.au)

## Singapore

**Phone:** +65 6733 4292

**Email:** [sales@temperzone.com.sg](mailto:sales@temperzone.com.sg)

## Wellington

**Phone:** (04) 569 3262

**Email:** [wgtn@temperzone.com](mailto:wgtn@temperzone.com)

## Melbourne

**Phone:** (03) 8769 7600

**Email:** [vicsales@temperzone.com.au](mailto:vicsales@temperzone.com.au)

## Christchurch

**Phone:** (03) 379 3216

**Email:** [chch@temperzone.com](mailto:chch@temperzone.com)

## Brisbane

**Phone:** (07) 3308 8333

**Email:** [qldsales@temperzone.com.au](mailto:qldsales@temperzone.com.au)

## Perth

**Phone:** (08) 6399 5900

**Email:** [reception@airskill.com.au](mailto:reception@airskill.com.au)



Specifications are subject to change without notice due to the manufacturer's ongoing research and development programme.