

**COMPRESSORI PER TRASPORTO**  
**TRANSPORT COMPRESSORS**

*Compressori tipo aperto*

*Open type compressors*

**4T**



**DORIN**



## CARATTERISTICHE

### Piastre valvole

Le piastre valvole utilizzate su questi modelli sono state fatte progettare appositamente da un Fornitore altamente qualificato per ottimizzare le performances anche ad elevate velocità di rotazione.



Lato compressione piastra valvole

## FEATURES

### Valve plates

Valve plates used on these models have been designed by a high qualified Supplier in order to optimize their performances even at high revolving speed

### Pompa olio

I compressori sono equipaggiati con pompa olio a lobi che può lavorare in entrambi i sensi di rotazione.

### Flessibilità

Gli attacchi per le prese di servizio ed il tappo di carica dell'olio sono previste su entrambi i lati. E' possibile, su richiesta, fornire compressori "personalizzati" per meglio rispondere ad eventuali particolari necessità del cliente. I rubinetti di mandata ed aspirazione possono essere installati in differenti posizioni secondo le esigenze del cliente.

### Affidabilità

Particolare cura è stata posta per garantire la massima affidabilità di questa gamma. L'uso dei cuscinetti a rulli su entrambi i mozzi, il generoso dimensionamento dell'albero, delle bielle e degli spinotti, unito ad un nuovo premistoppa, fanno sì che l'obiettivo "affidabilità" sia raggiunto.

### Prestazioni

I condotti interni, le piastre valvole, il rapporto alesaggio/corsa, la posizione dei cilindri a V; tutto è stato ottimizzato per ottenere un'elevata efficienza.

### Oil pump

Compressors are equipped with lobe oil pump operating in both rotation senses

### Flexibility

Connections for service taps and oil charge plug are provided on both sides. Upon request, it is possible to supply "customized" compressors in order to meet particular necessities of our client. Discharge and service valves may be installed in two different positions according to our customer's requirements.

### Reliability

Our best attention has been given in order to guarantee the maximum reliability of this range. Our purpose of "reliability" has been achieved thanks to use of roll bearings on both hubs and to the generous dimensioning of the shaft, connecting rods and piston pins together with a new shaft seal.

### Performances

The internal pipelines, the valve plates, the bore/stroke ratio, the V cylinders location have been optimized so to obtain a high efficiency.

### Intercambiabilità su impianti esistenti

Le dimensioni di ingombro, i fori di fissaggio, così come le posizioni dei rubinetti di servizio e gli attacchi per la puleggia elettromagnetica sono stati studiati per facilitare il montaggio di questi compressori sia su impianti nuovi che esistenti.

### Corpo

I compressori sono costruiti in alluminio con alettatura per facilitare il raffreddamento del corpo e delle teste. Particolare attenzione è stata posta al fine di ridurre il più possibile sia gli ingombri che il peso di questi modelli. Per esempio sono stati progettati dei nuovi rubinetti in alluminio che contribuiscono a ridurre il peso del compressore di circa 1,5 Kg. Inoltre la progettazione è stata eseguita in modo da ridurre il numero delle tenute (guarnizioni) e quindi la possibilità di fughe di refrigerante.

### Bilanciamento

Tutte le parti meccaniche sono state ottimizzate al fine di migliorare il più possibile il bilanciamento dinamico dell'insieme e ridurre così le vibrazioni anche ad elevate velocità di rotazione. Oltre ad un accurato bilanciamento dinamico dell'albero e delle masse alterne dei pistoni, spinotti e bielle, la scelta della disposizione a V dei cilindri è un ulteriore aiuto. Infatti, il V formato dai cilindri è più "aperto" rispetto ai compressori presenti sul mercato permettendo di avere una coppia motrice più costante, riducendo le vibrazioni ed i carichi sulle cinghie aumentandone la durata.

### Dispositivo di parzializzazione

I compressori possono essere equipaggiati con dispositivo di parzializzazione della resa frigorifera (50%). Vi è inoltre la possibilità di montare bobine magnetiche con diversi tipi di tensione. La testa parzializzata è stata progettata in modo da non aumentare gli ingombri (la valvola solenoide è stata posizionata orizzontalmente rispetto all'asse del compressore e la testa è stata smussata per limitarne la sporgenza).

### Interchangeability on external equipment

The overhaul dimensions, the fixing holes as well as the service valves locations and electromagnetic clutch connections are designed in order to permit the assembling of these compressors on new or existing plants.

### Body

Compressors are made in aluminium with finings in order to facilitate the body and heads cooling. Particular attention was made to reduce at maximum either the dimensions and the weight of these models. For example, the new aluminium service valve have been designed reducing the weight of the compressor of about 1,5 KGS. Furthermore, design has been made as to reduce the number of seals (gasket) and consequently the possibility of leaks of refrigerant.

### Balancing

All mechanical parts have been optimized in order to improve the dynamic balancing of the assembly and reduce the vibrations even at high revolving speed. Beside the precise dynamic balancing of the shaft and the alternate masses of the pistons, piston pins and connecting rods further help is given by having chosen to V dispose to cylinder. As a matter of fact, the V made by cylinders is more "open" if compared to the compressors available in the market, this enabling to have a more constant deflecting and reducing the vibrations and loads on the belts wich are therefore lasting longer.

### Capacity control device

Compressors may be equipped with refrigerating capacity control device (50%). Magnetic coils with several voltage supply are available. The capacity controlled head has been designed in order not to increase the dimensions (the solenoid valve has been placed horizontally compared to the compressor assy and the head has been chamfered to limit its overhang)



Dettaglio della testa con dispositivo di parzializzazione

Detail of capacity control device solenoid

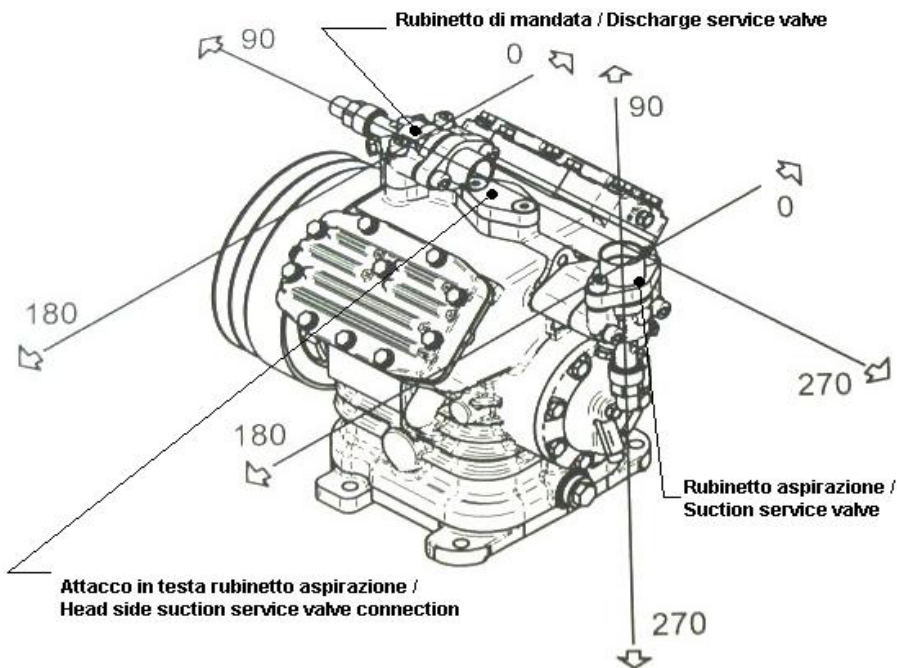


## DATI TECNICI

## TECHNICAL DATA

Compressore tipo Compressor type	Cilindri Cylinders	Alesaggio Bore	Corsa Stroke	Volume spostato 1450RPM Displacement at 1450rpm	Volume spostato 2900RPM Displacement at 2900rpm	Rubinetto aspirazione Suction valve	Rubinetto scarico Discharge valve	Carica olio Oil charge	Peso Weight	RPM minimo Minimum speed	RPM massimo Maximum speed
	n.			mc/h	mc/h	SL	DL	Kg	Kg	R.P.M.	R.P.M.
4T-39	4	57	38	33,74	67,49	35 s	28 s	2	34,5	500	3000
4T-44	4	61	38	38,65	77,29	35 s	28 s	2	34	500	3000
4T-57	4	57	56	49,73	99,46	35 s	28 s	2	33	500	3000
4T-65	4	61	56	56,95	113,91	35 s	28 s	2	32,5	500	3000

### VERSATILITA' POSIZIONAMENTO RUBINETTI ASPIRAZIONE E SCARICO SUCTION SERVICE VALVE AND DISCHARGE SERVICE VALVE POSITIONS



<b>4T</b>		<b>RUBINETTO DI MANDATA DISCHARGE SERVICE VALVE</b>					
		Orientamento / Assembly position					
			0°	90°	180°	270°	
RUBINETTO ASPIRAZIONE SUCTION SERVICE VALVE	Orientamento Assembly position	Montaggio laterale Pump side assembly	0°	A/B/C/D	A/B/C/D	A/B/C/D	A/B/C/D
			90°	B/C	B/C	B/C	B/C
			180°	A/B/C/D	A/B/C/D	A/B/C/D	A/B/C/D
			270°	B/C	B/C	B/C	B/C
	Montaggio in testa Upper assembly	0°	A/B/C/D	D	A/B/C/D	D	
		90°					
		180°	A/B/C/D	D	A/B/C/D	D	
		270°					

**A** = montaggio senza spessorazione sui rubinetti / assembly without tickness on service valves

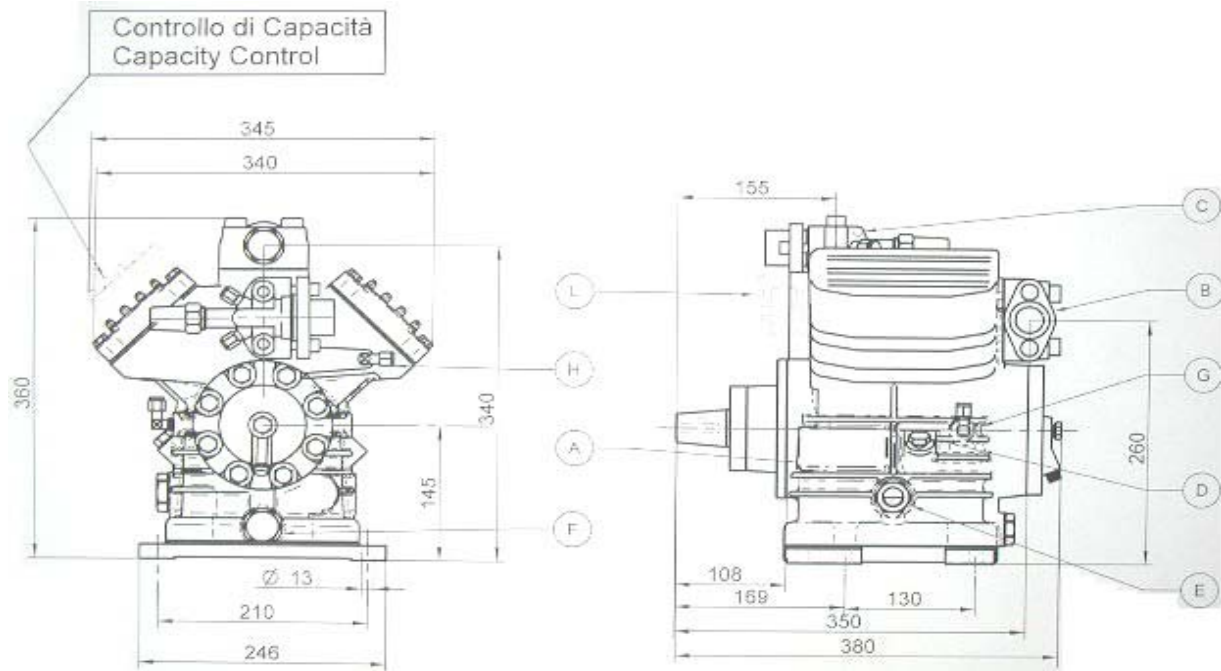
**B** = montaggio con spessorazione sui due rubinetti / assembly with tickness on both service valves

**C** = montaggio con spessori su rubinetto aspirazione e senza spessori su rubinetto di mandata / assembly of suction service valve with tickness and discharge service valve without tickness

**D** = montaggio con spessori su rubinetto mandata e senza spessori su rubinetto di aspirazione / assembly of discharge service valve with tickness and suction service valve without tickness

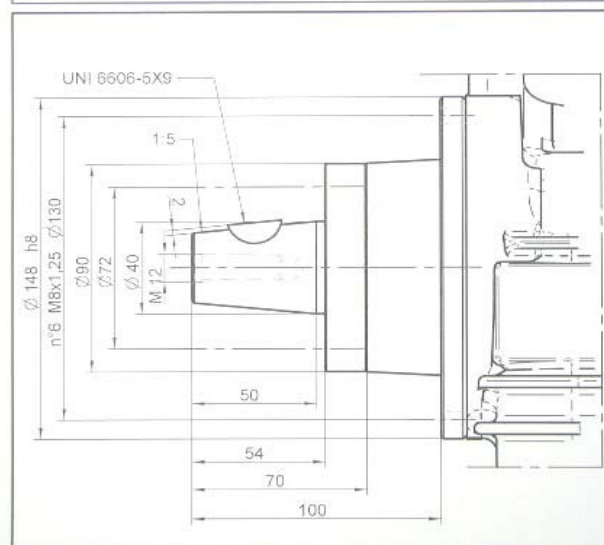


**DISEGNI DIMENSIONI DI INGOMBRO CONFIGURAZIONE STANDARD**  
**OVERALL DIMENSIONS DRAWINGS WITH STANDARD VERSION**

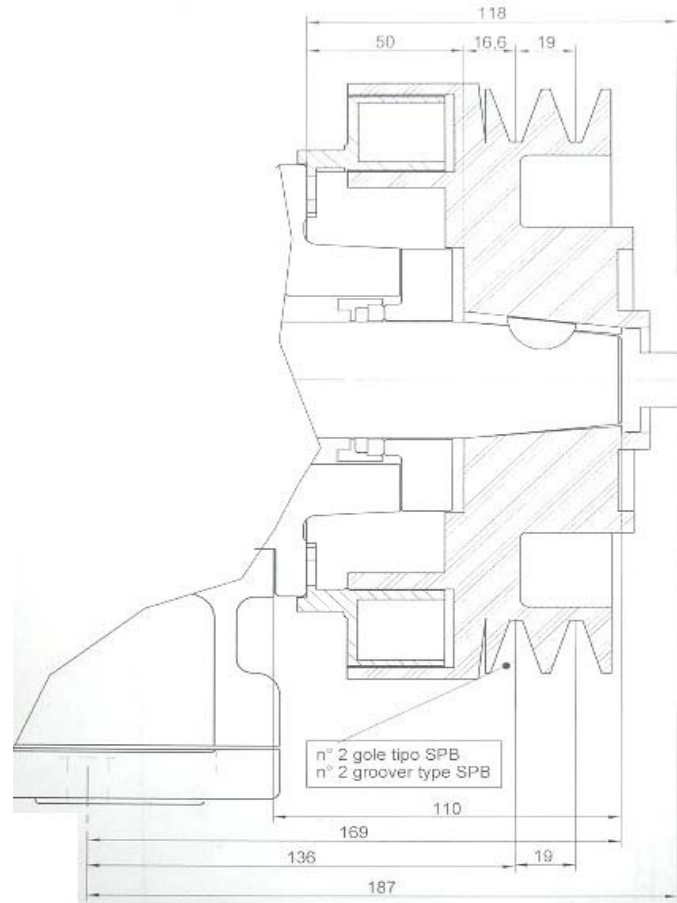


- |   |                           |                          |
|---|---------------------------|--------------------------|
| A | Targhetta                 | Name Plate               |
| B | Rubinetto Aspirazione     | Suction Valve            |
| C | Rubinetto Compressione    | Discharge Valve          |
| D | Tappo carica olio         | Oil fill plug            |
| E | Spia olio                 | Oil Window               |
| F | Filtro olio               | Oil Filter               |
| G | Raccordo Bassa Pressione  | Low Pressure Tap         |
| H | Raccordo Alta Pressione   | High Pressure Tap        |
| L | Bobina Regolatore Potenza | Capacity Regulating Coil |

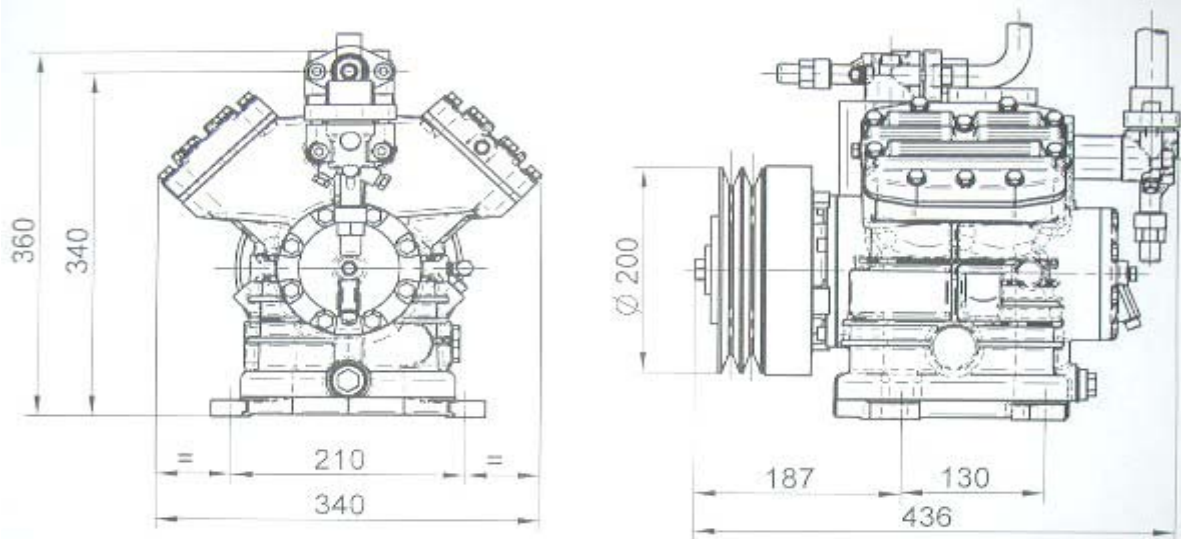
Parte finale albero - Shaft End



**VISTA D'ASSIEME DELLA PULEGGIA ELETTROMAGNETICA**  
*Dimensioni di ingombro*  
**GENERAL VIEW OF MAGNETIC CLUTCH ASSY**  
*Overall dimensions*



**DISEGNI DIMENSIONI DI INGOMBRO CONFIGURAZIONE CON PULEGGIA ELETTROMAGNETICA**  
**OVERALL DIMENSIONS DRAWINGS WITH MAGNETIC CLUTCH VERSION**



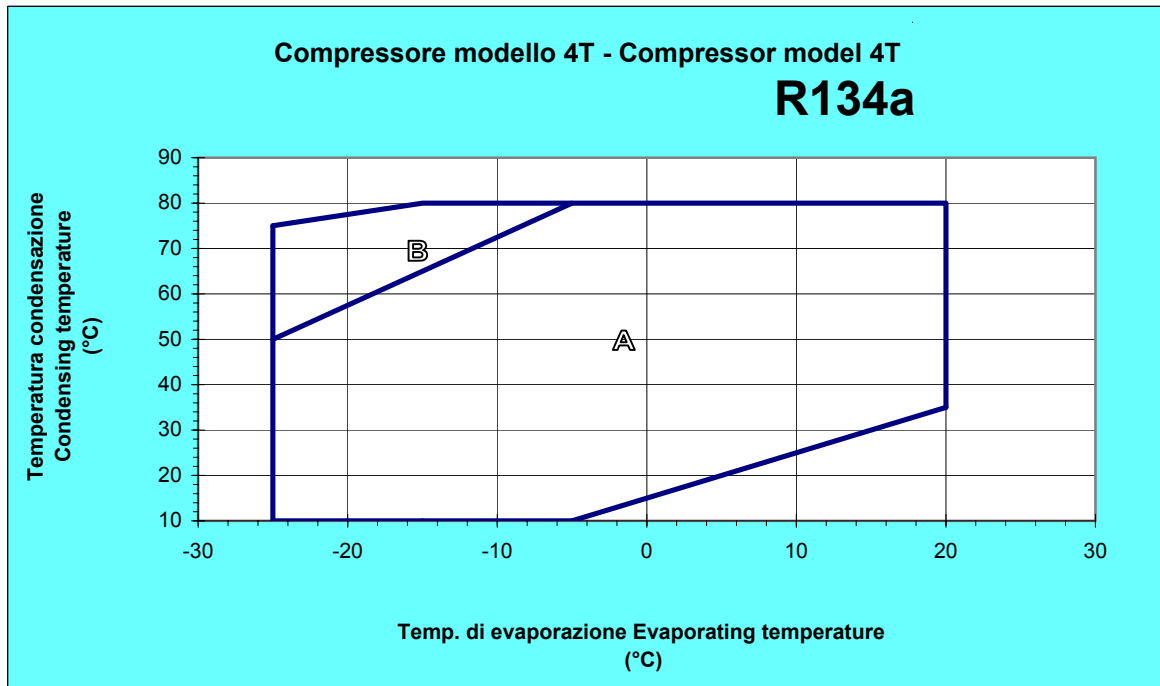


CAMPO DI APPLICAZIONE

AREAS DESCRIPTION

A = Applicazione standard - Standard application

B = Max surrisc.  $\Delta toh=20^{\circ}K$  - Max overheating  $\Delta toh=20^{\circ}K$





DATI CARATTERISTICI

PERFORMANCE DATA

R134a	n RPM		500		1000		1500		2000		2500		3000	
	V.s. [m3/h]		11,63		23,27		34,9		46,54		58,15		69,8	
4T-39	to	tc	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa
	°C	°C	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]
	10	40	7150	1,37	17200	3,13	25600	4,73	33400	6,38	40300	8,18	45000	9,78
	5	40	5940	1,46	14300	3,11	21200	4,66	27700	6,29	33400	8,04	37400	9,66
	0	40	4890	1,41	11700	2,97	17400	4,48	22700	6,04	27400	7,75	30700	9,26
	-5	40	3970	1,33	9490	2,79	14100	4,18	18400	5,67	22200	7,26	25000	8,75
	-10	40	3160	1,22	7540	2,56	11200	3,84	14600	5,17	17600	6,63	19900	8,02
	-15	40	2490	1,10	5930	2,30	8800	3,48	11500	4,68	13900	6,00	15700	7,28
	-20	40	1930	0,98	4580	2,08	6800	3,13	8890	4,24	10700	5,40	12100	6,52
	-25	40	1420	0,83	3370	1,83	5000	2,76	6530	3,73	7880	4,76	8940	5,78
	10	50	6260	1,67	15100	3,83	22400	5,76	29300	7,80	35300	9,96	39400	11,90
	5	50	5180	1,61	12500	3,69	18500	5,50	24200	7,44	29100	9,51	32600	11,45
	0	50	4240	1,51	10200	3,44	15100	5,16	19700	6,98	23800	8,97	26700	10,72
	-5	50	3440	1,40	8210	3,17	12200	4,77	15900	6,45	19200	8,24	21600	9,95
	-10	50	2740	1,28	6530	2,90	9700	4,37	12700	5,93	15300	7,51	17200	9,09
	-15	50	2130	1,14	5050	2,59	7500	3,90	9800	5,27	11800	6,72	13400	8,16
	-20	50	1620	1,05	3840	2,34	5700	3,52	7450	4,76	8980	6,08	10200	7,39
	-25	50	1170	0,93	2760	2,09	4100	3,15	5360	4,27	6460	5,45	7330	6,62
	10	60	5390	1,95	13000	4,42	19300	6,68	25200	9,04	30400	11,54	33900	13,81
	5	60	4430	1,83	10600	4,15	15800	6,26	20600	8,45	24900	10,86	27800	13,02
	0	60	3600	1,70	8620	3,85	12800	5,79	16700	7,81	20200	10,03	22600	11,96
	-5	60	2900	1,56	6940	3,55	10300	5,33	13500	7,25	16200	9,18	18200	11,09
	-10	60	2290	1,42	5450	3,21	8100	4,84	10600	6,55	12800	8,39	14400	10,08
	-15	60	1790	1,31	4240	2,94	6300	4,43	8230	5,98	9920	7,62	11200	9,23
	-20	60	1340	1,20	3160	2,68	4700	4,05	6140	5,48	7400	6,99	8390	8,48
	-25	60	910	1,09	2150	2,43	3200	3,67	4180	4,95	5040	6,34	5720	7,56

R134a	n RPM		500		1000		1500		2000		2500		3000	
	V.s. [m3/h]		13,3		26,6		40		53,2		66,5		80	
4T-44	to	tc	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa
	°C	°C	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]
	10	40	8300	1,59	20000	3,64	29700	5,48	38800	7,41	46800	9,49	52200	11,34
	5	40	6870	1,58	16500	3,56	24500	5,38	32000	7,28	38600	9,32	43200	11,14
	0	40	5650	1,51	13500	3,42	20100	5,16	26300	7,01	31600	8,91	35500	10,76
	-5	40	4590	1,42	11000	3,25	16300	4,87	21300	6,56	25700	8,41	28900	10,10
	-10	40	3670	1,32	8750	2,96	13000	4,46	17000	6,03	20500	7,70	23100	9,29
	-15	40	2920	1,20	6940	2,70	10300	4,08	13500	5,50	16200	7,01	18300	8,45
	-20	40	2240	1,07	5320	2,42	7900	3,64	10300	4,91	12400	6,26	14100	7,62
	-25	40	1680	0,96	3970	2,15	5900	3,25	7710	4,40	9290	5,62	10600	6,86
	10	50	7270	1,95	17500	4,43	26000	6,66	34000	9,02	40900	11,53	45700	13,79
	5	50	6000	1,87	14400	4,22	21400	6,36	28000	8,63	33700	11,01	37700	13,22
	0	50	4920	1,75	11800	4,00	17500	5,97	22900	8,09	27600	10,37	30900	12,47
	-5	50	3970	1,63	9490	3,67	14100	5,55	18400	7,45	22200	9,54	25000	11,50
	-10	50	3160	1,47	7540	3,34	11200	5,03	14600	6,81	17600	8,67	19900	10,47
	-15	50	2470	1,33	5860	3,00	8700	4,53	11400	6,15	13700	7,81	15500	9,43
	-20	50	1880	1,21	4440	2,70	6600	4,08	8620	5,51	10400	7,04	11800	8,51
	-25	50	1370	1,10	3230	2,46	4800	3,70	6270	5,00	7560	6,38	8590	7,76
	10	60	6260	2,26	15100	5,17	22400	7,78	29300	10,51	35300	13,49	39400	16,11
	5	60	5160	2,13	12400	4,85	18400	7,30	24000	9,87	29000	12,61	32400	15,16
	0	60	4160	1,96	10000	4,46	14800	6,70	19300	9,05	23300	11,61	26100	13,83
	-5	60	3350	1,80	8010	4,09	11900	6,18	15500	8,29	18700	10,61	21100	12,84
	-10	60	2660	1,64	6330	3,72	9400	5,61	12300	7,64	14800	9,66	16700	11,65
	-15	60	2070	1,50	4920	3,41	7300	5,14	9540	6,93	11500	8,81	13000	10,71
	-20	60	1530	1,38	3640	3,10	5400	4,65	7060	6,30	8510	8,05	9640	9,75
	-25	60	1050	1,25	2490	2,80	3700	4,24	4840	5,74	5830	7,32	6620	8,88

Le rese sono riferite a: temperatura gas aspirato 25°C, senza sottoraffreddamento del liquido, surriscaldamento 100% utile.

Datas are referred to 25°C suction temperature, without liquid subcooling, Overheating 100% useful.

Max. surriscaldamento  $\Delta t_{oh} = 20^\circ K$  - Max overheating  $\Delta t_{oh} = 20^\circ K$

TENTATIVE DATA





## DATI CARATTERISTICI

## PERFORMANCE DATA

R134a	n RPM V.s. [m3/h]		500 17,15		1000 34,3		1500 51,45		2000 68,6		2500 85,75		3000 102,9	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-57	10	40	10700	2,06	25700	4,68	38200	7,05	49900	9,52	60100	12,24	67100	14,61
	5	40	8860	2,02	21300	4,62	31600	6,94	41300	9,39	49700	12,02	55700	14,33
	0	40	7280	1,95	17400	4,41	25900	6,67	33800	9,00	40800	11,50	45800	13,82
	-5	40	5920	1,84	14100	4,13	21000	6,25	27400	8,45	33100	10,81	37200	13,08
	-10	40	4750	1,70	11300	3,83	16800	5,76	22000	7,81	26500	9,95	29800	11,93
	-15	40	3740	1,54	8890	3,46	13200	5,21	17200	7,01	20800	8,98	23500	10,89
	-20	40	2900	1,38	6870	3,12	10200	4,70	13300	6,35	16100	8,11	18200	9,83
	-25	40	2160	1,24	5120	2,78	7600	4,19	9930	5,66	12000	7,23	13600	8,81
	10	50	9360	2,51	22600	5,74	33500	8,61	43800	11,64	52700	14,85	58900	17,75
	5	50	7730	2,40	18600	5,46	27600	8,22	36100	11,11	43400	14,18	48600	17,01
	0	50	6320	2,25	15200	5,13	22500	7,71	29400	10,41	35400	13,30	39700	15,97
	-5	50	5130	2,10	12300	4,76	18200	7,12	23800	9,66	28700	12,36	32200	14,84
	-10	50	4070	1,91	9700	4,29	14400	6,48	18800	8,74	22700	11,20	25600	13,49
	-15	50	3200	1,74	7610	3,91	11300	5,88	14800	7,99	17800	10,14	20100	12,22
	-20	50	2440	1,56	5790	3,53	8600	5,31	11200	7,16	13500	9,14	15300	11,08
	-25	50	1770	1,42	4170	3,17	6200	4,78	8100	6,46	9770	8,25	11100	10,03
	10	60	8050	2,91	19400	6,64	28800	9,98	37600	13,45	45300	17,30	50600	20,64
	5	60	6640	2,75	16000	6,24	23700	9,42	31000	12,67	37300	16,29	41800	19,47
	0	60	5370	2,53	12900	5,76	19100	8,67	25000	11,65	30100	15,01	33700	17,99
	-5	60	4340	2,34	10400	5,31	15400	7,96	20100	10,76	24200	13,74	27300	16,65
	-10	60	3420	2,13	8150	4,80	12100	7,23	15800	9,77	19100	12,57	21500	15,05
	-15	60	2660	1,95	6330	4,39	9400	6,61	12300	8,91	14800	11,37	16700	13,77
	-20	60	1990	1,78	4710	4,01	7000	6,03	9150	8,16	11000	10,40	12500	12,64
	-25	60	1370	1,63	3230	3,65	4800	5,50	6270	7,42	7560	9,50	8590	11,53

R134a	n RPM V.s. [m3/h]		500 19,64		1000 39,28		1500 58,92		2000 78,56		2500 98,20		3000 117,80	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-65	10	40	12600	2,43	30300	5,50	45000	8,29	58800	11,25	70800	14,33	79100	17,15
	5	40	10400	2,38	25100	5,43	37200	8,17	48600	11,02	58600	14,13	65600	16,98
	0	40	8570	2,30	20500	5,21	30500	7,84	39800	10,61	48000	13,57	53900	16,24
	-5	40	6960	2,15	16600	4,87	24700	7,35	32300	9,96	38900	12,67	43700	15,25
	-10	40	5590	1,99	13300	4,48	19800	6,80	25900	9,18	31200	11,77	35200	14,20
	-15	40	4420	1,81	10500	4,09	15600	6,18	20400	8,34	24600	10,63	27800	12,85
	-20	40	3410	1,62	8080	3,67	12000	5,54	15700	7,51	18900	9,52	21400	11,53
	-25	40	2540	1,45	5990	3,25	8900	4,91	11600	6,64	14000	8,47	15900	10,28
	10	50	11000	2,95	26500	6,71	39400	10,13	51500	13,66	62000	17,50	69200	20,94
	5	50	9110	2,83	21900	6,42	32500	9,69	42500	13,02	51200	16,77	57300	20,03
	0	50	7450	2,65	17800	6,00	26500	9,08	34600	12,27	41700	15,64	46800	18,85
	-5	50	6030	2,46	14400	5,58	21400	8,39	28000	11,36	33700	14,45	37900	17,40
	-10	50	4800	2,25	11400	5,07	17000	7,66	22200	10,31	26800	13,18	30200	15,95
	-15	50	3770	2,04	8960	4,59	13300	6,93	17400	9,35	20900	11,87	23700	14,46
	-20	50	2870	1,84	6800	4,15	10100	6,25	13200	8,41	15900	10,73	18000	13,07
	-25	50	2080	1,67	4920	3,74	7300	5,62	9540	7,60	11500	9,73	13100	11,85
	10	60	9470	3,43	22800	7,78	33900	11,71	44300	15,91	53400	20,35	59600	24,31
	5	60	7790	3,22	18700	7,33	27800	10,99	36300	14,87	43800	19,05	49000	22,88
	0	60	6350	3,00	15200	6,78	22600	10,25	29500	13,87	35600	17,65	39900	21,23
	-5	60	5100	2,75	12200	6,24	18100	9,40	23600	12,70	28500	16,23	32100	19,46
	-10	60	4040	2,52	9630	5,67	14300	8,55	18700	11,56	22500	14,72	25400	17,78
	-15	60	3120	2,27	7410	5,14	11000	7,73	14400	10,43	17300	13,35	19600	16,13
	-20	60	2330	2,09	5520	4,70	8200	7,08	10700	9,55	12900	12,20	14600	14,77
	-25	60	1600	1,89	3770	4,25	5600	6,41	7320	8,67	8820	11,07	10000	13,43

Le rese sono riferite a: temperatura gas aspirato 25°C, senza sottoraffreddamento del liquido, surriscaldamento 100% utile.

Datas are referred to 25°C suction temperature, without liquid subcooling, Overheating 100% useful.

Max. surriscaldamento  $\Delta t_{oh}=20^{\circ}\text{K}$  - Max overheating  $\Delta t_{oh}=20^{\circ}\text{K}$

TENTATIVE DATA

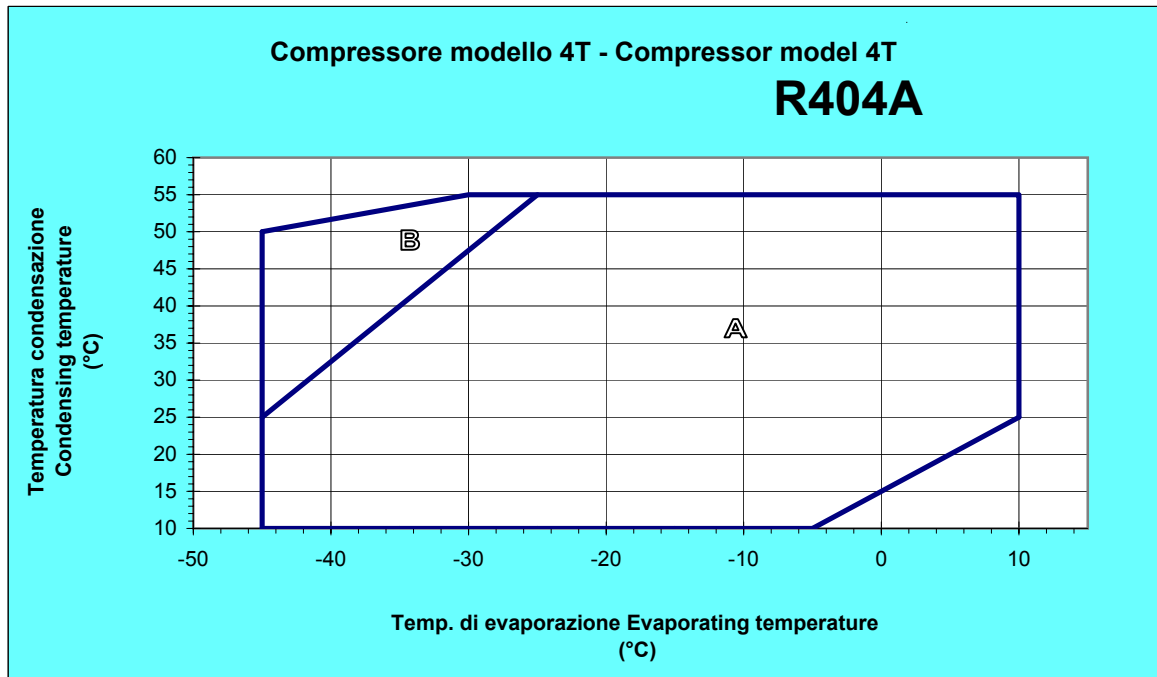


CAMPO DI APPLICAZIONE

AREAS DESCRIPTION

A = Applicazione standard - Standard application

B = Max surrisc.  $\Delta toh=20^{\circ}K$  - Max overheating  $\Delta toh=20^{\circ}K$





## DATI CARATTERISTICI PERFORMANCE DATA

R404A	n RPM		500		1000		1500		2000		2500			
	V.s. [m3/h]		11,63		23,27		34,9		46,54		58,15			
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]		
4T-39	10	30	13000	1,70	31100	3,88	46400	5,86	60500	7,92	73000	10,15		
	5	30	11000	1,94	26600	4,16	39400	6,24	51400	8,41	62000	10,76		
	0	30	9340	2,01	22300	4,25	33200	6,41	43300	8,65	52400	11,12		
	-5	30	7810	2,04	18700	4,25	27700	6,37	36200	8,64	43700	11,00		
	-10	30	6450	1,97	15400	4,13	22800	6,20	29600	8,34	35900	10,69		
	-15	30	5250	1,86	12500	3,92	18700	5,93	24300	7,97	29400	10,22		
	-20	30	4260	1,73	10100	3,70	15100	5,58	19800	7,55	23800	9,61		
	-25	30	3360	1,58	8050	3,41	11900	5,13	15600	6,94	18800	8,84		
	-30	30	2620	1,44	6280	3,09	9280	4,63	12300	6,28	14800	7,99		
	-35	30	2010	1,28	4780	2,75	7090	4,12	9360	5,59	11300	7,12		
	-40	30	1480	1,12	3530	2,41	5230	3,63	6910	4,92	8320	6,26		
	10	40	11300	2,31	27100	5,25	40400	7,93	52700	10,69	63600	13,69		
	5	40	9570	2,50	23100	5,35	34200	8,02	44600	10,82	53800	13,80		
	0	40	8060	2,50	19300	5,26	28700	7,93	37400	10,74	45200	13,76		
	-5	40	6710	2,45	16100	5,10	23800	7,64	31100	10,37	37600	13,31		
	-10	40	5520	2,29	13100	4,83	19500	7,25	25300	9,75	30700	12,56		
	-15	40	4480	2,14	10700	4,49	15900	6,78	20600	9,13	25000	11,69		
	-20	40	3620	1,94	8580	4,17	12700	6,27	16700	8,49	20100	10,81		
	-25	40	2830	1,76	6760	3,78	10000	5,68	13200	7,69	15900	9,79		
	-30	40	2180	1,57	5230	3,37	7730	5,06	10200	6,87	12300	8,74		
	-35	40	1650	1,38	3920	2,97	5810	4,46	7660	6,05	9240	7,71		
	-40	40	1170	1,20	2810	2,60	4160	3,89	5500	5,28	6620	6,72		
	10	50	9510	2,85	23000	6,50	34100	9,79	44600	13,25	53500	16,93		
	5	50	8050	2,81	19500	6,44	28600	9,59	37400	12,95	45100	16,52		
	0	50	6730	2,72	16200	6,17	23900	9,25	31200	12,56	37800	16,11		
	-5	50	5600	2,59	13400	5,85	19900	8,80	25900	11,85	31200	15,20		
	-10	50	4580	2,42	11000	5,48	16300	8,27	21300	11,23	25600	14,25		
	-15	50	3710	2,22	8790	4,99	13100	7,54	17000	10,18	20600	12,96		
	-20	50	2970	2,04	7040	4,57	10400	6,87	13600	9,29	16400	11,85		
	-25	50	2300	1,82	5430	4,08	8130	6,14	10600	8,30	12800	10,61		
	-30	50	1760	1,60	4140	3,61	6210	5,41	8090	7,32	9760	9,36		
	-35	50	1290	1,40	3050	3,15	4570	4,73	5950	6,39	7180	8,17		
	-40	50	890	1,22	2100	2,73	3150	4,10	4100	5,54	4960	7,07		
	R404A	n RPM		500		1000		1500		2000		2500		
			V.s. [m3/h]		13,3		26,6		40		53,2		66,5	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]		
	4T-44	10	30	15100	1,97	36200	4,50	53800	6,81	70100	9,17	84500	11,84	
		5	30	12800	2,10	30600	4,76	45400	7,20	59400	9,71	71700	12,50	
		0	30	10800	2,15	25800	4,89	38300	7,38	50300	10,02	60400	12,77	
		-5	30	9030	2,17	21700	4,94	32300	7,41	42100	10,02	50700	12,72	
-10		30	7480	2,13	17900	4,78	26400	7,19	34600	9,76	41600	12,41		
-15		30	6150	2,04	14600	4,59	21900	6,96	28600	9,40	34400	11,97		
-20		30	4930	1,92	11800	4,30	17600	6,49	22800	8,75	27600	11,13		
-25		30	3930	1,76	9390	3,96	14000	5,96	18100	8,04	21700	10,25		
-30		30	3070	1,60	7310	3,59	10800	5,40	14200	7,27	17000	9,26		
-35		30	2340	1,43	5580	3,20	8250	4,81	10800	6,48	13100	8,24		
-40		30	1750	1,24	4130	2,80	6100	4,23	7980	5,70	9640	7,26		
10		40	13100	2,68	31500	6,10	46800	9,21	61100	12,38	73700	15,96		
5		40	11100	2,71	26500	6,13	39400	9,26	51600	12,49	62200	16,04		
0		40	9330	2,67	22300	6,06	33100	9,13	43500	12,45	52100	15,81		
-5		40	7760	2,61	18700	5,93	27700	8,89	36100	12,02	43600	15,39		
-10		40	6400	2,48	15300	5,59	22600	8,41	29600	11,41	35600	14,58		
-15		40	5250	2,34	12500	5,26	18600	7,96	24300	10,77	29200	13,70		
-20		40	4190	2,15	10000	4,85	14800	7,29	19300	9,84	23300	12,52		
-25		40	3310	1,95	7890	4,39	11700	6,61	15300	8,91	18300	11,36		
-30		40	2550	1,74	6090	3,92	9000	5,90	11800	7,95	14200	10,13		
-35		40	1920	1,54	4570	3,46	6760	5,21	8850	7,01	10700	8,93		
-40		40	1380	1,33	3280	3,02	4850	4,54	6350	6,12	7670	7,79		
10		50	11000	3,31	26600	7,52	39400	11,32	51600	15,30	62200	19,71		
5		50	9300	3,25	22400	7,37	33100	11,15	43500	15,06	52300	19,19		
0		50	7800	3,14	18800	7,17	27700	10,68	36300	14,49	43800	18,57		
-5		50	6470	3,00	15400	6,76	23000	10,27	29900	13,76	36100	17,60		
-10		50	5300	2,79	12700	6,32	18700	9,51	24500	12,92	29500	16,43		
-15		50	4290	2,57	10200	5,80	15100	8,75	19800	11,83	23900	15,07		
-20		50	3430	2,36	8110	5,26	12100	7,97	15700	10,79	19100	13,78		
-25		50	2690	2,11	6340	4,70	9460	7,12	12300	9,61	14900	12,29		
-30		50	2050	1,86	4830	4,14	7220	6,28	9380	8,48	11400	10,85		
-35		50	1500	1,62	3550	3,62	5310	5,48	6910	7,40	8390	9,47		
-40		50	1040	1,40	2450	3,14	3660	4,74	4770	6,41	5790	8,20		

Le rese sono riferite a: temperatura gas aspirato 25°C, senza sottoraffreddamento del liquido, surriscaldamento 100% utile.  
 Datae are referred to 25°C suction temperature, without liquid subcooling, Overheating 100% useful.

Max. surriscaldamento  $\Delta\text{toh}=30^\circ\text{K}$  - Max overheating  $\Delta\text{toh}=30^\circ\text{K}$

TENTATIVE DATA



## DATI CARATTERISTICI PERFORMANCE DATA

R404A	n RPM		500		1000		1500		2000		2500	
	V.s. [m3/h]		17,15		34,3		51,45		68,6		85,75	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-57	10	30	19400	2,54	46500	5,79	69100	8,75	90200	11,86	108800	15,21
	5	30	16500	2,70	39700	6,18	58800	9,32	76700	12,58	92300	16,09
	0	30	13900	2,78	33200	6,30	49500	9,54	64500	12,84	78100	16,47
	-5	30	11600	2,80	27600	6,29	41300	9,55	54100	12,87	65000	16,36
	-10	30	9680	2,75	23100	6,19	34100	9,26	44800	12,59	53800	15,99
	-15	30	7900	2,60	18700	5,88	28000	8,88	36400	11,89	44000	15,27
	-20	30	6390	2,48	15100	5,54	22700	8,37	29700	11,28	35700	14,47
	-25	30	5060	2,26	12000	5,10	18000	7,70	23300	10,45	28200	13,24
	-30	30	3970	2,06	9360	4,62	14100	6,97	18400	9,41	22100	12,03
	-35	30	3020	1,85	7140	4,13	10700	6,19	14000	8,38	16900	10,69
	-40	30	2250	1,62	5270	3,61	7920	5,46	10400	7,37	12400	9,41
	10	40	16900	3,45	40500	7,85	60100	11,84	78600	16,01	94800	20,51
	5	40	14300	3,48	34400	7,95	51000	11,98	66600	16,18	80100	20,64
	0	40	12000	3,45	28700	7,81	42800	11,80	55800	15,95	67400	20,38
	-5	40	10000	3,37	23800	7,55	35500	11,46	46400	15,44	55900	19,80
	-10	40	8280	3,20	19700	7,23	29200	10,83	38300	14,73	46100	18,78
	-15	40	6740	2,99	16000	6,74	23800	10,16	30900	13,62	37400	17,48
	-20	40	5430	2,78	12800	6,24	19100	9,41	25100	12,68	30200	16,27
	-25	40	4260	2,51	10100	5,66	15100	8,53	19700	11,57	23800	14,67
	-30	40	3300	2,24	7800	5,05	11700	7,61	15300	10,29	18400	13,15
	-35	40	2480	1,99	5850	4,46	8790	6,71	11500	9,07	13800	11,58
	-40	40	1780	1,74	4190	3,89	6300	5,85	8250	7,91	9890	10,10
	10	50	14200	4,26	34500	9,75	50900	14,66	66500	19,77	80000	25,28
	5	50	12000	4,19	28800	9,51	42900	14,37	55900	19,36	67300	24,73
	0	50	10000	4,05	24100	9,20	35700	13,86	46600	18,64	56200	23,87
	-5	50	8360	3,87	20100	8,79	29500	13,13	38800	17,79	46700	22,77
	-10	50	6820	3,60	16300	8,13	24200	12,29	31500	16,48	38100	21,16
	-15	50	5570	3,35	13300	7,54	19700	11,41	25800	15,40	31100	19,57
	-20	50	4480	3,06	10600	6,89	15700	10,37	20500	14,03	24600	17,79
	-25	50	3490	2,74	8290	6,15	12300	9,27	16000	12,49	19300	15,94
	-30	50	2650	2,42	6330	5,43	9380	8,19	12200	11,02	14700	14,06
	-35	50	1960	2,11	4650	4,74	6900	7,14	8980	9,62	10800	12,27
	-40	50	1360	1,82	3210	4,11	4760	6,19	6200	8,34	7450	10,63

R404A	n RPM		500		1000		1500		2000		2500	
	V.s. [m3/h]		19,64		39,28		58,92		78,56		98,20	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-65	10	30	22800	2,99	54800	6,82	81300	10,29	106400	13,97	128000	17,88
	5	30	19400	3,17	46500	7,26	69000	10,94	90200	14,73	108800	19,01
	0	30	16300	3,28	39200	7,44	58100	11,21	76000	15,13	91900	19,44
	-5	30	13700	3,28	32600	7,40	48700	11,20	63800	15,13	76800	19,25
	-10	30	11400	3,24	27100	7,24	40200	11,00	52700	14,81	63400	18,87
	-15	30	9340	3,08	22200	6,94	33100	10,51	43200	14,19	52000	18,11
	-20	30	7510	2,91	17800	6,52	26700	9,84	34900	13,34	41800	16,92
	-25	30	5970	2,66	14200	6,00	21100	9,06	27600	12,33	33000	15,61
	-30	30	4670	2,42	11000	5,44	16500	8,21	21700	11,12	25800	14,10
	-35	30	3540	2,16	8410	4,84	12600	7,29	16500	9,91	19700	12,54
	-40	30	2650	1,89	6210	4,24	9290	6,43	12200	8,71	14600	11,04
	10	40	19800	4,07	47700	9,24	70800	13,92	92700	18,86	111600	24,11
	5	40	16800	4,09	40300	9,34	59900	14,07	78300	18,95	94400	24,39
	0	40	14100	4,07	33900	9,22	50200	13,86	65700	18,79	79300	24,06
	-5	40	11800	3,94	28100	8,89	41800	13,44	54700	18,15	66000	23,29
	-10	40	9720	3,77	23100	8,46	34400	12,86	45100	17,32	54300	22,17
	-15	40	7970	3,54	19000	7,96	28200	12,03	36700	16,26	44200	20,73
	-20	40	6380	3,26	15100	7,35	22500	11,06	29500	15,00	35300	19,02
	-25	40	5020	2,96	11900	6,66	17700	10,04	23300	13,66	27900	17,30
	-30	40	3880	2,64	9180	5,94	13700	8,97	18000	12,16	21500	15,42
	-35	40	2910	2,32	6890	5,23	10300	7,90	13500	10,72	16100	13,59
	-40	40	2090	2,03	4940	4,57	7390	6,89	9690	9,35	11600	11,85
	10	50	16700	5,02	40200	11,37	59900	17,17	78300	23,24	94200	29,77
	5	50	14100	4,94	33900	11,21	50500	16,93	65800	22,84	79400	29,20
	0	50	11800	4,75	28300	10,75	42000	16,29	54800	22,00	66200	28,08
	-5	50	9820	4,53	23500	10,28	34800	15,49	45600	20,94	54900	26,72
	-10	50	8050	4,25	19200	9,59	28600	14,47	37100	19,46	44800	24,87
	-15	50	6550	3,92	15600	8,86	23200	13,44	30300	18,03	36500	23,05
	-20	50	5260	3,60	12400	8,09	18500	12,17	24100	16,39	29000	20,93
	-25	50	4110	3,23	9680	7,23	14500	10,90	18800	14,66	22700	18,72
	-30	50	3140	2,84	7390	6,38	11100	9,62	14300	12,94	17300	16,52
	-35	50	2300	2,49	5430	5,57	8170	8,39	10500	11,29	12700	14,42
	-40	50	1590	2,15	3750	4,82	5640	7,27	7240	9,79	8760	12,49

Le rese sono riferite a: temperatura gas aspirato 25°C, senza sottoraffreddamento del liquido, surriscaldamento 100% utile.

Datas are referred to 25°C suction temperature, without liquid subcooling, Overheating 100% useful.

Max. surriscaldamento  $\Delta t_{oh}=30^{\circ}K$  - Max overheating  $\Delta t_{oh}=30^{\circ}K$

TENTATIVE DATA

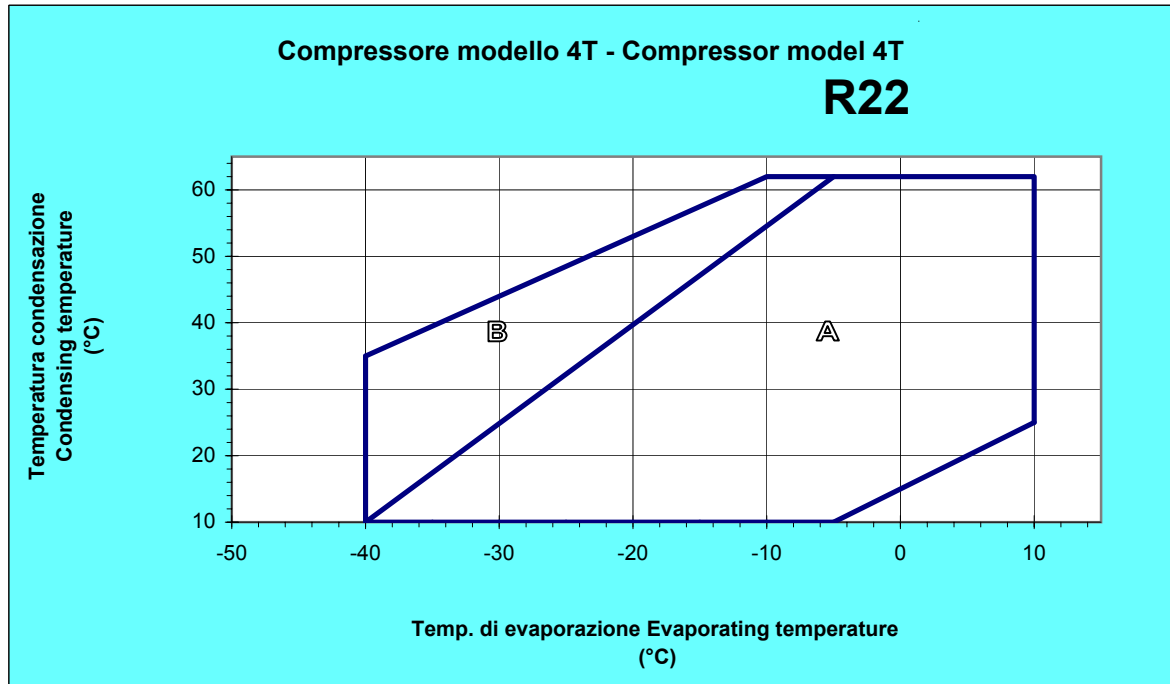


CAMPO DI APPLICAZIONE

AREAS DESCRIPTION

A = Applicazione standard - Standard Application

B = Max surrisc.  $\Delta toh=20^{\circ}K$  - Max overheating  $\Delta toh=20^{\circ}K$







**DATI CARATTERISTICI PERFORMANCE DATA**

R22	n RPM		500		1000		1500		2000		2500	
	V.s. [m3/h]		11,63		23,27		34,9		46,54		58,15	
4T-39	to	tc	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa
	°C	°C	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]
	10	30	11900	1,50	28500	3,41	42500	5,17	55400	6,99	66800	8,94
	5	30	10000	1,73	24300	3,69	36000	5,55	47100	7,48	56700	9,58
	0	30	8540	1,80	20400	3,79	30300	5,72	39500	7,71	47800	9,93
	-5	30	7120	1,82	17000	3,79	25200	5,70	32900	7,73	39800	9,82
	-10	30	5860	1,75	14000	3,70	20800	5,55	26800	7,45	32700	9,55
	-15	30	4780	1,65	11300	3,49	17000	5,29	22000	7,11	26700	9,11
	-20	30	3840	1,55	9140	3,30	13700	4,99	17900	6,75	21500	8,58
	-25	30	3040	1,43	7280	3,06	10800	4,61	14100	6,24	16900	7,93
	-30	30	2380	1,31	5670	2,81	8380	4,20	11100	5,70	13400	7,25
	-35	30	1810	1,20	4320	2,55	6410	3,82	8450	5,18	10200	6,63
	-40	30	1360	1,09	3190	2,34	4740	3,51	6240	4,78	7510	6,06
	10	40	10900	2,06	26200	4,71	38700	7,12	50600	9,61	61100	13,69
	5	40	9210	2,26	22200	4,81	32800	7,23	42900	9,75	51700	13,80
	0	40	7740	2,26	18400	4,75	27500	7,15	36000	9,70	43400	13,76
	-5	40	6440	2,21	15400	4,61	22800	6,90	29900	9,38	36000	13,31
	-10	40	5270	2,07	12600	4,36	18700	6,55	24300	8,83	29500	12,56
	-15	40	4260	1,93	10200	4,08	15200	6,14	19700	8,27	23900	11,69
	-20	40	3470	1,78	8190	3,81	12100	5,70	15900	7,73	19000	10,81
	-25	40	2710	1,60	6440	3,47	9520	5,25	12600	7,09	15100	9,79
	-30	40	2080	1,49	4960	3,17	7360	4,77	9710	6,46	11700	8,74
	-35	40	1580	1,35	3720	2,90	5520	4,36	7270	5,91	8770	7,71
	10	50	9770	2,60	23700	5,94	35100	8,95	45800	12,11	54900	15,49
	5	50	8270	2,59	20200	5,91	29400	8,78	38600	11,87	46500	15,15
	0	50	6950	2,50	16700	5,66	24600	8,49	32100	11,54	38900	14,79
	-5	50	5800	2,39	13800	5,40	20600	8,09	26600	10,90	32300	14,00
	-10	50	4730	2,24	11300	5,06	16800	7,64	22000	10,37	26300	13,15
	-15	50	3830	2,07	9060	4,63	13500	7,00	17600	9,46	21300	12,05
	-20	50	3040	1,91	7260	4,28	10700	6,45	14000	8,74	16900	11,14
	-25	50	2350	1,74	5590	3,92	8370	5,88	10900	7,95	13200	10,15

R22	n RPM		500		1000		1500		2000		2500	
	V.s. [m3/h]		13,3		26,6		40		53,2		66,5	
4T-44	to	tc	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa	Pr	Pa
	°C	°C	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]	[watt]	[kw]
	10	30	13800	1,74	33100	3,96	49300	6,01	64100	8,09	77400	10,42
	5	30	11700	1,87	27900	4,23	41500	6,41	54400	8,64	65600	11,13
	0	30	9870	1,92	23500	4,37	35000	6,59	45900	8,94	55100	11,41
	-5	30	8240	1,94	19700	4,41	29300	6,63	38300	8,96	46200	11,36
	-10	30	6800	1,89	16300	4,28	24000	6,43	31400	8,71	37900	11,09
	-15	30	5600	1,81	13200	4,08	19900	6,21	25900	8,39	31300	10,68
	-20	30	4450	1,71	10700	3,84	15900	5,80	20600	7,83	24900	9,94
	-25	30	3560	1,58	8490	3,56	12700	5,36	16400	7,23	19600	9,20
	-30	30	2780	1,45	6600	3,27	9750	4,90	12800	6,60	15300	8,40
	-35	30	2110	1,34	5040	2,97	7460	4,47	9750	6,01	11800	7,68
	-40	30	1600	1,21	3730	2,72	5520	4,09	7210	5,53	8710	7,02
	10	40	12600	2,39	30500	5,48	44900	8,27	58700	11,13	70800	14,32
	5	40	10700	2,45	25500	5,51	37800	8,34	49600	11,26	59800	14,45
	0	40	8960	2,41	21300	5,48	31700	8,23	41900	11,24	50100	14,28
	-5	40	7450	2,35	17900	5,36	26500	8,03	34700	10,88	41700	13,91
	-10	40	6120	2,25	14700	5,05	21600	7,59	28400	10,33	34200	13,19
	-15	40	4990	2,11	11900	4,78	17800	7,21	23300	9,76	27900	12,41
	-20	40	4020	1,97	9540	4,43	14100	6,63	18400	8,96	22100	11,41
	-25	40	3170	1,78	7520	4,03	11100	6,11	14600	8,21	17400	10,46
	-30	40	2440	1,65	5780	3,69	8560	5,56	11200	7,48	13500	9,54
	-35	40	1830	1,51	4340	3,38	6420	5,09	8400	6,85	10200	8,74
	10	50	11300	3,02	27400	6,88	40600	10,35	53000	13,99	63800	18,03
	5	50	9550	2,99	23200	6,77	34100	10,21	44900	13,80	53900	17,60
	0	50	8050	2,88	19400	6,58	28500	9,80	37300	13,31	45000	17,05
	-5	50	6700	2,77	15900	6,24	23800	9,44	30700	12,66	37300	16,21
	-10	50	5470	2,59	13100	5,84	19300	8,79	25300	11,93	30300	15,16
	-15	50	4430	2,39	10500	5,38	15600	8,13	20500	10,99	24700	14,02
	-20	50	3520	2,21	8360	4,92	12500	7,49	16200	10,15	19700	12,95
	-25	50	2750	2,02	6530	4,51	9740	6,82	12700	9,20	15300	11,76

Le rese sono riferite a: temperatura gas aspirato 25°C, senza sottoraffreddamento del liquido, surriscaldamento 100% utile.  
 Datas are referred to 25°C suction temperature, without liquid subcooling, Overheating 100% useful.

Max. surriscaldamento ΔtoH=20°K - Max overheating ΔtoH=20°K

TENTATIVE DATA



**DATI CARATTERISTICI PERFORMANCE DATA**

R22	n RPM		500		1000		1500		2000		2500	
	V.s. [m3/h]		17,15		34,3		51,45		68,6		85,75	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-57	10	30	17800	2,24	42600	5,10	63300	7,73	82500	10,47	99600	13,39
	5	30	15100	2,40	36300	5,48	53800	8,29	70300	11,19	84400	14,33
	0	30	12700	2,48	30300	5,63	45200	8,51	58800	11,46	71200	14,71
	-5	30	10600	2,51	25100	5,62	37500	8,55	49200	11,50	59200	14,61
	-10	30	8800	2,45	21000	5,54	31000	8,28	40600	11,25	49000	14,29
	-15	30	7200	2,31	16900	5,23	25500	7,93	33000	10,61	40000	13,63
	-20	30	5760	2,21	13700	4,94	20600	7,49	26800	10,09	32200	12,91
	-25	30	4580	2,03	10900	4,59	16300	6,92	21100	9,38	25400	11,88
	-30	30	3600	1,87	8460	4,22	12700	6,32	16600	8,54	20000	10,91
	-35	30	2730	1,74	6450	3,83	9670	5,75	12600	7,77	15300	9,95
	-40	30	2060	1,59	4760	3,50	7170	5,27	9400	7,15	11200	9,11
	10	40	16300	3,08	39200	7,05	57600	10,64	75500	14,39	91100	18,40
	5	40	13800	3,15	33100	7,14	49000	10,79	64000	14,58	76900	18,59
	0	40	11500	3,12	27400	7,06	41000	10,64	53700	14,40	64800	18,41
	-5	40	9600	3,03	22800	6,83	34000	10,35	44600	13,97	53500	17,90
	-10	40	7910	2,90	18900	6,53	27900	9,78	36700	13,33	44200	16,99
	-15	40	6410	2,69	15300	6,12	22800	9,21	29600	12,34	35800	15,83
	-20	40	5210	2,55	12200	5,70	18200	8,55	23900	11,55	28600	14,82
	-25	40	4070	2,29	9620	5,20	14400	7,88	18800	10,67	22700	13,50
	-30	40	3150	2,13	7400	4,75	11100	7,17	14600	9,68	17500	12,39
	-35	40	2370	1,95	5560	4,35	8350	6,55	10900	8,86	13100	11,33
	10	50	14600	3,89	35600	8,92	52400	13,40	68300	18,07	82100	23,12
	5	50	12300	3,86	29900	8,73	44200	13,16	57700	17,74	69400	22,68
	0	50	10300	3,72	24800	8,44	36700	12,72	47900	17,12	57800	21,92
	-5	50	8650	3,57	20700	8,11	30500	12,07	39800	16,36	48300	20,97
-10	50	7040	3,34	16800	7,51	25000	11,35	32500	15,22	39200	19,53	
-15	50	5760	3,12	13700	7,00	20300	10,60	26700	14,31	32200	18,20	
-20	50	4590	2,87	10900	6,45	16200	9,74	21100	13,20	25300	16,72	
-25	50	3570	2,62	8530	5,90	12700	8,88	16500	11,96	19800	15,25	

R22	n RPM		500		1000		1500		2000		2500	
	V.s. [m3/h]		19,64		39,28		58,92		78,56		98,20	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-65	10	30	20900	2,65	50200	6,00	74500	9,08	97400	12,33	117200	15,74
	5	30	17700	2,82	42500	6,44	63100	9,73	82600	13,11	99500	16,93
	0	30	14900	2,93	35800	6,65	53000	10,00	69300	13,50	83800	17,37
	-5	30	12500	2,93	29700	6,61	44200	10,02	58000	13,52	69900	17,19
	-10	30	10400	2,88	24600	6,48	36600	9,84	47800	13,23	57800	16,86
	-15	30	8510	2,73	20100	6,18	30100	9,38	39200	12,67	47300	16,16
	-20	30	6770	2,60	16100	5,82	24200	8,80	31500	11,93	37700	15,10
	-25	30	5400	2,40	12800	5,40	19100	8,14	25000	11,08	29700	14,01
	-30	30	4230	2,20	9940	4,96	14900	7,44	19600	10,09	23300	12,79
	-35	30	3190	2,02	7590	4,49	11400	6,77	14900	9,19	17800	11,68
	-40	30	2430	1,85	5610	4,11	8410	6,21	11000	8,46	13200	10,68
	10	40	19000	3,64	46200	8,29	67900	12,50	89100	16,95	107300	21,63
	5	40	16200	3,70	38800	8,39	57500	12,68	75300	17,08	90700	21,97
	0	40	13500	3,68	32300	8,33	48100	12,50	63300	16,97	76200	21,73
	-5	40	11300	3,55	26900	8,04	40000	12,14	52600	16,42	63200	21,05
	-10	40	9290	3,42	22100	7,64	32900	11,61	43300	15,68	52100	20,06
	-15	40	7580	3,19	18100	7,23	27000	10,90	35200	14,74	42300	18,78
	-20	40	6120	2,99	14400	6,71	21400	10,05	28100	13,66	33400	17,33
	-25	40	4800	2,69	11300	6,12	16900	9,27	22200	12,59	26600	15,92
	-30	40	3710	2,51	8710	5,59	13000	8,45	17100	11,44	20400	14,52
	-35	40	2780	2,28	6550	5,10	9790	7,72	12800	10,47	15300	13,30
	10	50	17200	4,59	41400	10,40	61700	15,70	80400	21,24	96700	27,23
	5	50	14500	4,55	35100	10,29	52000	15,50	67900	20,93	81900	26,78
	0	50	12200	4,36	29200	9,87	43200	14,95	56300	20,21	68100	25,79
	-5	50	10200	4,18	24300	9,48	36000	14,24	46800	19,26	56800	24,61
-10	50	8310	3,94	19800	8,86	29500	13,37	38300	17,97	46100	22,95	
-15	50	6770	3,65	16100	8,22	23900	12,48	31400	16,75	37800	21,44	
-20	50	5390	3,38	12800	7,57	19100	11,43	24800	15,42	29900	19,67	
-25	50	4200	3,09	9970	6,94	14900	10,44	19400	14,03	23300	17,91	

Le rese sono riferite a: temperatura gas aspirato 25°C, senza sottoraffreddamento del liquido, surriscaldamento 100% utile.

Datas are referred to 25°C suction temperature, without liquid subcooling, Overheating 100% useful.

Max. surriscaldamento ΔtoH=20°K - Max overheating ΔtoH=20°K

TENTATIVE DATA

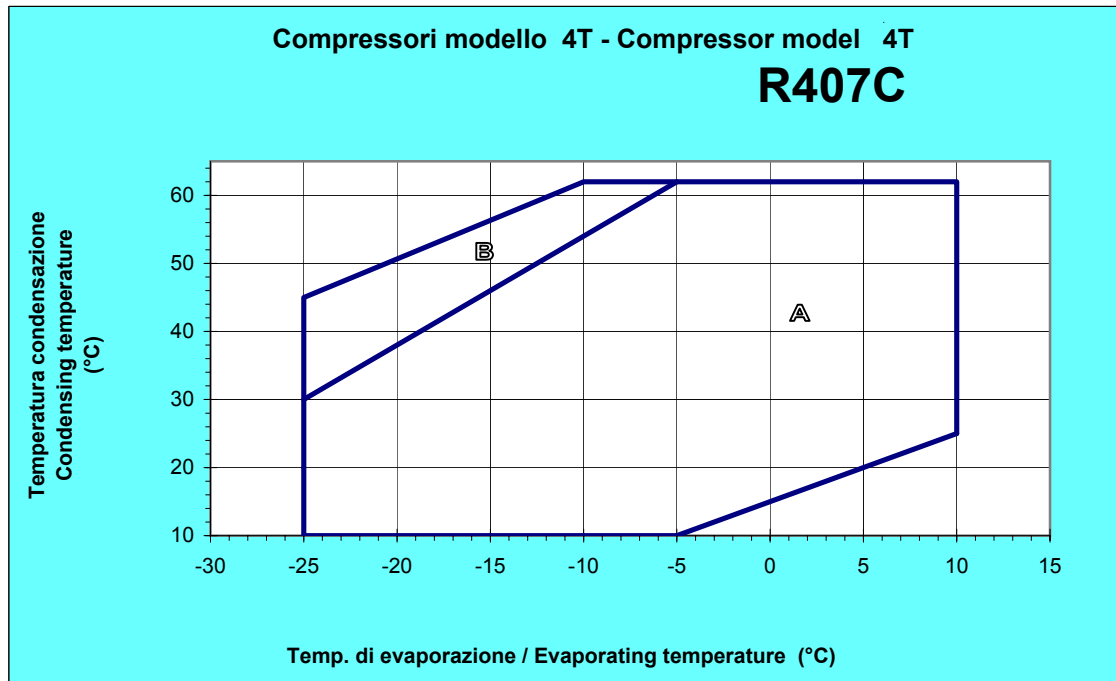


CAMPO DI APPLICAZIONE

AREAS DESCRIPTION

A = Applicazione standard - Standard Application

B = Max surrisc.  $\Delta toh=20^{\circ}K$  - Max overheating  $\Delta toh=20^{\circ}K$



**DATI CARATTERISTICI PERFORMANCE DATA**

R407C	n RPM		500		1000		1500		2000		2500	
	V.s. [m3/h]		17,15		34,3		51,45		68,6		85,75	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-57	10	30	18500	2,42	44300	5,51	65800	8,35	85700	11,31	103500	14,48
	5	30	15600	2,55	37400	5,82	55400	8,80	72400	11,88	86900	15,21
	0	30	12900	2,59	30900	5,89	46100	8,90	59900	11,97	72600	15,37
	-5	30	10700	2,58	25300	5,79	37800	8,80	49500	11,85	59600	15,05
	-10	30	8750	2,48	20900	5,61	30800	8,40	40400	11,41	48700	14,49
	-15	30	7050	2,27	16500	5,15	25000	7,81	32300	10,45	39200	13,42
	10	40	16600	3,29	39900	7,52	58700	11,35	76900	15,35	92800	19,64
	5	40	13900	3,30	33400	7,50	49500	11,33	64600	15,31	77700	19,52
	0	40	11500	3,22	27400	7,29	41000	10,99	53600	14,88	64700	19,01
	-5	40	9460	3,08	22500	6,94	33500	10,52	43900	14,19	52700	18,19
	-10	40	7670	2,90	18300	6,52	27100	9,77	35600	13,32	42900	16,97
	-15	40	6120	2,64	14600	6,01	21800	9,04	28300	12,12	34200	15,55
	10	50	14600	4,09	35500	9,36	52200	14,07	68100	18,98	81900	24,28
	5	50	12100	3,98	29400	9,02	43500	13,59	56800	18,32	68300	23,43
	0	50	9980	3,78	24000	8,60	35600	12,95	46400	17,43	56000	22,31
	-5	50	8250	3,58	19700	8,12	29100	12,09	38000	16,40	46100	21,01
	-10	50	6600	3,29	15800	7,40	23500	11,18	30500	14,99	36800	19,24
	-15	50	5300	3,02	12600	6,76	18700	10,25	24600	13,83	29700	17,60

R407C	n RPM		500		1000		1500		2000		2500	
	V.s. [m3/h]		19,64		39,28		58,92		78,56		98,20	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-65	10	30	18400	3,05	44200	6,96	65600	10,52	85800	14,17	103400	18,30
	5	30	15300	3,11	36900	7,06	54600	10,62	71400	14,33	86300	18,44
	0	30	12700	3,06	30300	6,91	45000	10,47	59100	14,13	71200	17,96
	-5	30	10500	2,97	24800	6,67	36900	10,13	48100	13,63	58200	17,37
	-10	30	8460	2,77	20000	6,27	29900	9,52	39000	12,84	47000	16,39
	-15	30	6630	2,56	15800	5,73	23700	8,67	30800	11,75	36900	14,87
	10	40	16500	3,95	39500	8,96	58600	13,53	76700	18,22	92400	23,44
	5	40	13600	3,86	32600	8,75	48600	13,13	63900	17,81	77000	22,82
	0	40	11300	3,66	26900	8,30	40000	12,54	52500	16,96	63100	21,75
	-5	40	9150	3,47	21800	7,76	32400	11,80	42700	15,93	51300	20,38
	-10	40	7350	3,18	17600	7,22	26200	10,89	34100	14,72	41000	18,76
	-15	40	5840	2,94	13750	6,59	20400	9,87	26800	13,41	31900	17,02
	10	50	14500	4,77	35000	10,81	51800	16,28	67700	21,97	81700	28,12
	5	50	12000	4,50	28700	10,19	42500	15,45	55400	20,87	67000	26,64
	0	50	9880	4,25	23500	9,65	34900	14,50	45300	19,61	55000	25,05
	-5	50	7930	3,95	18900	8,87	28100	13,40	36500	18,01	44000	23,00
	-10	50	6350	3,60	15100	8,10	22400	12,29	29500	16,50	35500	21,12
	-15	50	4960	3,26	11800	7,32	17600	11,05	22800	14,91	27500	19,02

Le rese sono riferite a: temperatura gas aspirato 25°C, senza sottoraffreddamento del liquido, surriscaldamento 100% utile.

Le temperature indicate sono da intendersi come "mean temperatures".

Datas are referred to 25°C suction temperature, without liquid subcooling, Overheating 100% useful.

The indicated temperatures has to be considered as "mean temperatures".

Max. surriscaldamento  $\Delta t_{oh}=20^{\circ}\text{K}$  - Max overheating  $\Delta t_{oh}=20^{\circ}\text{K}$

TENTATIVE DATA

**DATI CARATTERISTICI PERFORMANCE DATA**

R407C	n RPM V.s. [m3/h]		500 11,63		1000 23,27		1500 34,9		2000 46,54		2500 58,15	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-39	10	30	12400	1,62	29600	3,69	44200	5,59	57600	7,55	69400	9,66
	5	30	10300	1,83	25000	3,92	37100	5,89	48500	7,95	58400	10,17
	0	30	8700	1,88	20800	3,96	30900	5,98	40300	8,06	48700	10,38
	-5	30	7170	1,88	17100	3,91	25400	5,87	33100	7,96	40100	10,12
	-10	30	5820	1,77	13900	3,75	20700	5,62	26600	7,55	32500	9,69
	-15	30	4680	1,63	11100	3,43	16600	5,21	21500	7,00	26100	8,98
	10	40	11100	2,20	26700	5,03	39400	7,60	51600	10,25	62300	14,61
	5	40	9300	2,37	22400	5,05	33100	7,59	43300	10,24	52200	14,49
	0	40	7730	2,33	18400	4,91	27500	7,39	36000	10,02	43400	14,21
	-5	40	6340	2,24	15200	4,69	22500	7,01	29500	9,53	35500	13,52
	-10	40	5110	2,07	12200	4,36	18100	6,54	23600	8,82	28600	12,55
	-15	40	4070	1,89	9740	4,00	14500	6,03	18800	8,13	22800	11,48
	10	50	9740	2,73	23600	6,24	35000	9,40	45700	12,72	54700	16,26
	5	50	8140	2,67	19900	6,11	28900	9,07	38000	12,26	45800	15,65
	0	50	6730	2,54	16200	5,77	23800	8,64	31100	11,74	37700	15,06
	-5	50	5530	2,39	13200	5,41	19700	8,11	25400	10,92	30800	14,03
	-10	50	4440	2,21	10600	4,99	15800	7,53	20600	10,22	24700	12,95
	-15	50	3530	2,00	8340	4,48	12400	6,77	16200	9,14	19600	11,66

R407C	n RPM V.s. [m3/h]		500 13,3		1000 26,6		1500 40		2000 53,2		2500 66,5	
	to °C	tc °C	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]	Pr [watt]	Pa [kw]
4T-44	10	30	14300	1,88	34400	4,28	51200	6,50	66600	8,75	80400	11,27
	5	30	12100	1,99	28700	4,49	42700	6,80	56000	9,17	67600	11,82
	0	30	10100	2,01	23900	4,57	35700	6,88	46800	9,34	56100	11,92
	-5	30	8300	2,00	19800	4,54	29500	6,83	38600	9,22	46500	11,70
	-10	30	6760	1,92	16200	4,34	23900	6,52	31200	8,84	37700	11,25
	-15	30	5480	1,78	12900	4,02	19500	6,12	25400	8,26	30600	10,52
	10	40	12800	2,56	31100	5,84	45800	8,83	59800	11,87	72100	15,28
	5	40	10800	2,57	25800	5,78	38200	8,76	50100	11,82	60400	15,17
	0	40	8950	2,49	21300	5,66	31700	8,51	41900	11,61	50000	14,75
	-5	40	7340	2,39	17600	5,45	26100	8,16	34200	11,05	41100	14,13
	-10	40	5940	2,24	14300	5,04	21000	7,59	27500	10,32	33200	13,18
	-15	40	4770	2,07	11400	4,69	17000	7,08	22300	9,59	26600	12,19
	10	50	11300	3,18	27300	7,22	40500	10,87	52800	14,69	63600	18,93
	5	50	9400	3,09	22800	6,99	33600	10,55	44200	14,25	53000	18,18
	0	50	7800	2,93	18800	6,70	27600	9,98	36100	13,55	43600	17,36
	-5	50	6390	2,77	15200	6,25	22700	9,46	29300	12,68	35600	16,24
	-10	50	5130	2,55	12300	5,75	18100	8,65	23700	11,75	28400	14,94
	-15	50	4080	2,32	9670	5,20	14400	7,86	18900	10,63	22700	13,55

Le rese sono riferite a: temperatura gas aspirato 25°C, senza sottoraffreddamento del liquido, surriscaldamento 100% utile.

Le temperature indicate sono da intendersi come "mean temperatures".

Datas are referred to 25°C suction temperature, without liquid subcooling, Overheating 100% useful.

The indicated temperatures has to be considered as "mean temperatures".

Max. surriscaldamento  $\Delta t_{oh}=20^{\circ}\text{K}$  - Max overheating  $\Delta t_{oh}=20^{\circ}\text{K}$

TENTATIVE DATA