

# Paket tip (PAKCOLD KM Serisi) **Soğuk su üretici gruplar**

E10-105/2.B

*Packaged type (PAKCOLD KM Series) Water chillers*

Elektronik kontrollü / *Electronic controlled*

Plastik makinaları,  
Klima sistemleri,  
Emar (MR) sistemleri,  
Muhtelif maksatlı  
soğuk su ihtiyacı için

*For plastic machines,  
Air conditioning systems,  
Emar (MR) systems,  
Multi purpose chilled  
water requirement*



Kapasite aralığı  
*Capacity range*

**1,26 kW - 168,8 kW**



Reg.No.:12 300 0019

## Cihaz Tanımı *Unit Description*

**E**RBAY Paket Tip Soğuk Su Üretici Grupları, EN ISO 9001:2000 Kalite Yönetim Sisteminin uygulandığı fabrikamızda dış ortamda çalışacak ve kapasite tablosundaki soğuk su çıkış sıcaklıklarını verecek şekilde dizayn edilmiştir. Soğutma Gruplarımız fabrikamızda her türlü boru ve kablo bağlantısı, gaz-yağ şarjı ve gerekli testleri yapılmış olarak ve yerine yerleştirmeye hazır halde teslim edilirler. Soğutma Gruplarımız sağlık emniyeti ve güvenlik gereksinimleri konusunda aşağıda belirtilen Avrupa Birliği direktiflerine ve ilgili harmonize standartlara uygundur.

Makine Direktifi (MD)	: 98/37/EC
Alçak Gerilim Direktifi (LVD)	: 73/23/EEC
Elektromanyetik Uyumluluk Direktifi (EMC)	: 89/336/EEC
Basınçlı Ekipmanlar Direktifi (PED)	: 97/23/EC

Aşağıdaki kısımlardan müteşekkil olan Soğutma Gruplarının kapasiteleri 1,26 kW ile 168,8 kW arasında değişmektedir.

**Ana gövde:** Cihazın alt şasesi üzerindeki ağırlıkları taşıyacak konstrüksiyonda ve uygun kalınlıkta galvanizli sacdan imal edilmekte ve sökülebilir bağlantılıdır. Cihazın karkas ve kapalı saçları için uygun kalınlıkta galvanizli sac kullanılmaktadır. Tüm sac aksam imalatı müteakip fırın boya ile bağlanmaktadır.

**Soğutma Kompresörü:** Scroll, hermetik veya yarı hermetik pistonlu kompresör kullanılmaktadır. Gerekli şebeke gerilimi 3x400V-50 Hz'dir.

**Kondenser (Yoğuşturucu):** Hava Soğutmalı Kondenserler bakır boru ve alüminyum lamelli olarak imal edilmektedir. Soğutucu akışkanın yoğuşmasını sağlamak üzere motoru ile direkt akuple yüksek verimli, aşırı akım koruma röleli, sessiz yataklı aksiyal fan cihaz üzerine monte edilmiştir. İsteğe bağlı olarak su soğutmalı kondenser kullanılarak cihaz üretilmektedir.

**Evaporatör:** Shell & Tube tipinde imal edilen direkt genişlemeli evaporatörler özel yüksek verimli bakır boruların çelik ayna deliklerine özel işlem ile tesbit edilmesi suretiyle üretilmiştir. Boru demetinin sökülebilir olması bakım ve temizlik imkanı sağlar. EN 14276-1 ve EN 13445 standartlarına uygun olarak imal edilen evaporatörler su ve glikol çözeltilerinin soğutulması için tasarlanmıştır. Evaporatörlerin dış yüzeyi ve kompresör emiş hatları uygun kalınlıkta izolasyon malzemesi kullanılarak izole edilmektedir.

**Fan ve motoru:** Hava soğutmalı kondenserli cihazlarda soğutucu gazın yoğuşmasını sağlamak üzere motoru ile direkt akuple yüksek verimli aksiyal fan, cihaz üzerine monte edilmiştir.

**Elektrik kumanda panosu:** Pak-cold cihazının tam otomatik çalışmasını sağlamak üzere cihaz üzerine konmuş olan pano yeterli miktarda kontaktör, termik, sigorta ve şalter ile teçhiz edilmiştir. Gerekli şebeke gerilimi; 3 faz - 400 Volt - 50 Hz'dir.

**Elektronik kontrol sistemi:** Cihazda elektronik kontrol sistemi kullanılmaktadır. Bu sayede su giriş ve çıkış sıcaklıkları, kompresör ve pompanın çalışma zamanları ve sistemde oluşan arızalar ekranda dijital olarak görülebilmekte ve cihazın optimum verimde çalışması sağlanmaktadır.

**Soğuk su pompası:** Cihaz ile tesis arasındaki su sirkülasyonunu sağlayabilmek için konmuştur. Tesisin basınç kayıplarına uygun olarak seçilmektedir.

**Soğuk su tankı:** Cihaz içerisinde yeterli kapasitede silindirik soğuk su tankı mevcuttur. Tank ısı kayıplarına ve terlemeye karşı uygun evsafı ve kalınlıkta izole malzemesi ile izole edilmektedir.

**Soğutma devresi elemanları:** Cihazın otomatik ve güvenli şekilde çalışması için; drayer-filtre, gözetleme camı, termostatik genişleme valfi, solenoid valf, alçak-yüksek basınç presostatı, su akış kontrol otomatığı ve soğutma valfleri konmuştur.

**E**RBAY Packaged type Water Chillers are designed to outdoor installation and provide chilled water leaving temperatures which are given on capacity tables in our factory carrying out EN ISO 9001:2000 Quality Management System. The Units are supplied to ready for installation. All connections, oil and refrigerant charge and required tests are made in our factory. Our units are in conformity with health and safety requirements of following European Union directives and relevant harmonized standards.

Machinery Directive (MD)	: 98/37/EC
Low Voltage Directive (LVD)	: 73/23/EEC
Electromagnetic Compatibility Directive (EMC)	: 89/336/EEC
Pressure Equipment Directive (PED)	: 97/23/EC

The capacity of the Units are varying between 1,26 kW and 168,8 kW and it's composed of the following parts;

**Main body:** Chassis of the unit is made from steel sheet iron with suitable thickness. It's designed in special construction for able to carry weights on it and have dismountable connections. Frame and covers of the unit also made from galvanised steel sheet iron with suitable thickness. All steel sheet parts are painted with oven-dry paint.

**Cooling compressor:** Scroll, hermetic or semi hermetic reciprocating compressor is used. Required power supply is 3 ph-400 Volt-50 Hz.

**Condenser:** Air cooled condensers are manufactured by pipes and aluminum fins. Current overload protected, high efficient direct drive axial fans which have noiseless bearing are mounted on the Unit to provide condensation of the refrigerant. The unit can be produced with water cooled condenser on request.

**Evaporator:** Direct expansion evaporator is manufactured in Shell & Tube form and special high efficient copper tubes are fixed to grooved steel tubesheet holes with tube expander method. It's allowed to maintenance and clean up because of the removable tube bundle. Evaporators are in conformity with EN 14276-1 and EN 13445 standards and designed for chilling water and glycol brines. External surface of evaporators and suction lines are insulated with insulation material with suitable thickness.

**Fan and motor:** The high efficient axial fan which is directly coupled with the motor is mounted on the device to provide the condensation of the refrigerant in the air cooled water chillers.

**Electrical control panel:** Equipped with enough number of contactors, thermics, fuses and on-off switches so as to operate the machine full automatically. Required power supply is 3 ph - 400 Volt 50 Hz.

**Electronic control system:** Electronic control system is used on the unit. By means of this entering and leaving water temperatures, operating times of compressor and pump, faults occurred on the system can be seen on the digital screen and also optimum efficient operation of the unit is provided.

**Chilled water pump:** Mounted so as to provide the water circulation between the chiller and the plant. The pump is chosen according to the pressure loss in the pipeline.

**Cold water tank:** Inside the unit, there is a cylindrical cold water tank which have enough volume. Tank is isolated with suitable material against the heat losses and condensation.

**Components of the cooling circuit:** For the machine to operate automatically and securely; drier filter, sight glass, thermostatic expansion valve, solenoid valve, low-high pressure switch, water flow-switch, liquid shut-off valves are included.

## Teknik Özellikler Technical Specifications

CİHAZ TIPI TYPE	R407C (3)	R22	Hermetik Pistonlu Hermetic Reciprocating				Scroll										Yarı Hermetik Pistonlu Semi Hermetic Reciprocating							
			PAKCOLD 2 KM	PAKCOLD 3 KM	PAKCOLD 4.5 KM	PAKCOLD 6 KM	PAKCOLD 8 KM	PAKCOLD 10 KM	PAKCOLD 16 KM	PAKCOLD 22 KM	PAKCOLD 27 KM	PAKCOLD 30 KM	PAKCOLD 40 KM	PAKCOLD 45 KM	PAKCOLD 55 KM	PAKCOLD 61 KM	PAKCOLD 74 KM	PAKCOLD 82 KM	PAKCOLD 94 KM	PAKCOLD 110 KM				
Nominal Kapasite (kW) Nominal Capacity	(1)	(2)	2,32	3,56	5,20	7,39	10,0	13,8	19,5	29,5	35,4	42,4	52,5	59,9	70,1	88,4	107,5	114,6	131,1	153,3	138,1	159,3	146,9	
Kompresör Tipi Compressor Type	(1)	(2)	0,56	0,88	1,52	1,77	2,1	2,5	3,2	5,3	6,4	7,7	9,7	12,4	13,0	16,6	20,0	24,3	28,7	35,7	30,4	37,0	41,1	
Nominal Kompresör Motor Gücü (kW) Nominal Compressor Motor Power	(1)	(2)	0,62	0,98	1,65	1,90	2,3	3,0	3,8	6,5	7,8	9,4	11,7	14,0	15,6	19,6	23,6	27,8	32,5	40,4	37,0	41,1	2 x 1,8	
Fan Adedi x Gücü (kW) Number of Fan x Power	(1)	(2)	1 x 0,07	1 x 0,16	1 x 0,35	1 x 0,35	1 x 0,35	1 x 0,75	1 x 0,78	2 x 0,75	2 x 0,75	2 x 0,75	2 x 0,75	2 x 0,78	3 x 0,75	3 x 0,78	3 x 0,78	2 x 1,8	2 x 1,8	2 x 1,8	2 x 1,8	2 x 1,8	2 x 1,8	2 x 1,8
Pompa Adedi x Gücü (kW) Number of Pump x Power	(1)	(2)	1 x 0,33	1 x 0,33	1 x 0,33	1 x 0,75	1 x 0,75	1 x 0,75	1 x 0,75	1 x 1,1	1 x 1,1	1 x 1,5	1 x 1,5	1 x 2,2	1 x 2,2	1 x 2,2	1 x 2,2	1 x 5,5	1 x 5,5	1 x 5,5	1 x 5,5	1 x 5,5	1 x 5,5	1 x 5,5
Pompa (1) Pump	400	612	895	1271	1720	2373	3354	5074	6089	7293	9030	10303	12057	15205	18490	19711	22549	26368	34	36	37	40	34	34
Su Tankı Kapasitesi (lt) (5) Capacity of the Reservoir	41	38,5	32	33	32	31,5	30	29,5	190	280	33,5	31,5	30	300	360	400	470	500	510	540	540	540	540	540
Soğutucu Gaz Miktarı (kg) Refrigerant Charge	2,7	3	4	6	8,5	10	11	12	14	17	19	20	22	23	29	30	37	40	40	40	40	40	40	40
Cihaz Ses Seviyesi dB(A) (4) Sound Pressure Level	50	51	53	53	53	54	55	55	55	55	55	55	56	57	58	60	60	60	60	60	60	60	60	60
İşletme Ağırlığı ~ (kg) Operating Weight	230	240	260	350	375	425	650	810	835	970	1085	1170	1320	1430	1650	1750	1820	1880	1880	1880	1880	1880	1880	1880

(3) Evaporasyon ve kondenzasyon sıcaklıklarının çığ noktasındaki değerlerine göre verilmiştir.  
Values are based on the Dew Point of evaporating and condensing temperatures.

(4) Boş alanda 10 metre mesafedeki değerlere göre verilmiştir.  
Values are based on free field conditions in 10 meter distance.

(5) Pakcold 2 KM ile Pakcold 10 KM arası cihazlarda prizmatik açık tip tank ve daldırma tip evaporatör, Pakcold 16 KM ile Pakcold 110 KM arası cihazlarda silindirik tank ve shell and tube tip evaporatör mevcuttur.  
Units between Pakcold 2 KM and Pakcold 10 KM have coil type evaporator inside the prismatical water tank, units between Pakcold 16 KM and Pakcold 110 KM have cylindrical water tank and shell&tube evaporator.

Not : Pakcold 2 KM ile Pakcold 10 KM arası cihazlar üstü kapalı ortamda çalışacak şekilde dizayn edilmiştir.  
Note: Units between Pakcold 2 KM and Pakcold 10 KM are designed for indoor.

(1) Nominal kapasite, 15°C su çıkış sıcaklığı ve 25°C dış hava sıcaklığına göre verilmiştir.  
Nominal capacity is based on 15°C chilled water leaving temp. and 25°C ambient temp.  
(2) Nominal kapasite, 15°C su çıkış sıcaklığı ve 33°C dış hava sıcaklığına göre verilmiştir.  
Nominal capacity is based on 15°C chilled water leaving temp. and 33°C ambient temp.

**Kapasite Tablosu** *Capacity Table (kW)*
**R407C**

TİP TYPE	Dış Hava Sic. Ambient Temp. °C	Su Çıkış Sıcaklığı / Chilled Water Leaving Temperature °C															
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
<b>PAKCOLD 2 KM</b>	25	1.71	1.80	1.89	1.99	2.08	2.12	2.17	2.22	2.27	2.32	2.37	2.43	2.47	2.52	2.58	
	30	1.56	1.65	1.73	1.83	1.92	1.96	2.01	2.05	2.10	2.15	2.20	2.25	2.29	2.34	2.40	
	35	1.41	1.50	1.58	1.66	1.75	1.79	1.83	1.88	1.93	1.97	2.01	2.06	2.11	2.15	2.20	
	40	1.26	1.33	1.41	1.49	1.57	1.62	1.65	1.69	1.74	1.78	1.82	1.87	1.92	1.96	2.00	
	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>PAKCOLD 3 KM</b>	25	2.62	2.76	2.89	3.04	3.18	3.25	3.33	3.40	3.48	3.56	3.64	3.72	3.80	3.88	3.96	
	30	2.44	2.56	2.70	2.84	2.98	3.05	3.12	3.38	3.26	3.33	3.41	3.49	3.57	3.65	3.73	
	35	2.25	2.36	2.48	2.63	2.75	2.82	2.89	2.96	3.03	3.10	3.17	3.25	3.33	3.40	3.48	
	40	2.04	2.15	2.28	2.39	2.52	2.58	2.65	2.72	2.79	2.85	2.92	3.00	3.07	3.14	3.21	
	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>PAKCOLD 4,5 KM</b>	25	3.83	4.03	4.22	4.44	4.65	4.76	4.86	4.98	5.09	5.20	5.32	5.44	5.55	5.68	5.80	
	30	3.60	3.79	3.98	4.17	4.37	4.48	4.58	4.68	4.79	4.90	5.00	5.11	5.23	5.33	5.46	
	35	3.35	3.53	3.70	3.89	4.08	4.17	4.27	4.36	4.47	4.57	4.67	4.77	4.88	4.98	5.10	
	40	3.10	3.25	3.42	3.59	3.77	3.86	3.94	4.03	4.13	4.22	4.32	4.42	4.52	4.62	4.70	
	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>PAKCOLD 6 KM</b>	25	5.30	5.60	5.90	6.22	6.54	6.70	6.87	7.04	7.21	7.39	7.56	7.74	7.92	8.11	8.29	
	30	4.82	5.10	5.38	5.68	5.98	6.14	6.29	6.45	6.62	6.78	6.95	7.12	7.29	7.46	7.64	
	35	4.34	4.60	4.86	5.14	5.42	5.57	5.72	5.86	6.02	6.17	6.33	6.49	6.65	6.81	6.98	
	40	3.86	4.09	4.34	4.60	4.86	5.00	5.13	5.27	5.42	5.56	5.71	5.86	6.01	6.16	6.31	
	45	3.37	3.59	3.82	4.05	4.30	4.42	4.55	4.68	4.81	4.95	5.09	5.22	5.36	5.51	5.65	
<b>PAKCOLD 8 KM</b>	25	7.9	8.2	8.5	8.8	9.2	9.3	9.5	9.7	9.9	10.0	10.2	10.4	10.6	10.7	10.9	
	30	7.5	7.8	8.1	8.4	8.7	8.8	9.0	9.2	9.3	9.5	9.7	9.9	10.0	10.2	10.4	
	35	7.0	7.2	7.5	7.8	8.1	8.3	8.5	8.6	8.7	8.9	9.1	9.3	9.4	9.6	9.8	
	40	6.5	6.7	7.0	7.3	7.6	7.7	7.9	8.0	8.2	8.3	8.5	8.6	8.8	9.0	9.1	
	45	6.0	6.2	6.5	6.8	7.0	7.2	7.4	7.4	7.5	7.7	7.9	8.0	8.1	8.3	8.5	
<b>PAKCOLD 10 KM</b>	25	10.8	11.3	11.7	12.2	12.7	12.9	13.1	13.3	13.6	13.8	14.1	14.3	14.6	14.8	15.1	
	30	10.3	10.7	11.1	11.5	12.0	12.2	12.4	12.6	12.9	13.1	13.3	13.6	13.8	14.0	14.3	
	35	9.6	10.0	10.4	10.8	11.2	11.4	11.6	11.9	12.1	12.3	12.5	12.8	13.0	13.2	13.5	
	40	9.0	9.3	9.6	10.1	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.2	12.4	12.6	
	45	8.3	8.6	9.0	9.4	9.7	9.9	10.2	10.4	10.6	10.8	11.0	11.2	11.4	11.6	11.8	
<b>PAKCOLD 16 KM</b>	25	15.3	15.9	16.5	17.1	17.8	18.1	18.4	18.8	19.1	19.5	19.8	20.2	20.5	20.9	21.2	
	30	14.5	15.0	15.5	16.2	16.8	17.1	17.5	17.8	18.1	18.4	18.8	19.1	19.5	19.8	20.1	
	35	13.5	14.0	14.6	15.2	15.7	16.1	16.4	16.7	17.0	17.3	17.6	17.9	18.3	18.6	19.0	
	40	12.7	13.2	13.7	14.2	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.1	17.4	17.7	
	45	11.7	12.2	12.7	13.2	13.7	14.0	14.3	14.5	14.8	15.0	15.3	15.6	15.9	16.2	16.5	
<b>PAKCOLD 22 KM</b>	25	23.1	24.0	24.9	25.9	26.9	27.4	27.9	28.4	28.9	29.5	30.0	30.6	31.1	31.7	32.2	
	30	21.7	22.6	23.5	24.4	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.4	29.9	30.5	
	35	20.3	21.1	22.0	22.9	23.8	24.2	24.7	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	
	40	18.9	19.7	20.5	21.3	22.2	22.6	23.0	23.5	23.9	24.4	24.8	25.3	25.8	26.3	26.8	
	45	17.5	18.2	18.9	19.7	20.5	20.9	21.3	21.8	22.2	22.6	23.1	23.5	24.0	24.4	24.9	
<b>PAKCOLD 27 KM</b>	25	27.7	28.8	29.9	31.1	32.2	32.9	33.5	34.1	34.7	35.4	36.0	36.7	37.3	38.0	38.7	
	30	26.1	27.1	28.2	29.1	30.4	31.0	31.6	32.1	32.7	33.4	34.0	34.6	35.2	35.9	36.5	
	35	24.4	25.4	26.4	27.4	28.5	29.1	29.6	30.2	30.7	31.3	31.9	32.5	33.1	33.7	34.4	
	40	22.7	23.6	24.6	25.6	26.6	27.1	27.6	28.2	28.7	29.3	29.8	30.4	31.0	31.5	32.1	
	45	20.9	21.8	22.7	23.7	24.6	25.1	25.6	26.1	26.6	27.1	27.7	28.2	28.8	29.3	29.9	

**Kapasite Tablosu** *Capacity Table (kW)*
**R407C**

TİP TYPE	Dış Hava Sic. Ambient Temp. °C	Su Çıkış Sıcaklığı / Chilled Water Leaving Temperature °C															
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
<b>PAKCOLD 30 KM</b>	25	33.3	34.6	35.9	37.3	38.7	39.4	40.2	40.9	41.7	42.4	43.2	44.0	44.8	45.6	46.4	
	30	31.3	32.5	33.8	35.1	36.5	37.2	37.9	38.6	39.3	40.0	40.8	41.5	42.3	43.1	43.9	
	35	29.3	30.5	31.7	32.9	34.2	34.9	35.5	36.2	36.9	37.6	38.3	39.0	39.7	40.5	41.2	
	40	27.2	28.3	29.5	30.7	31.9	32.5	33.2	33.8	34.4	35.1	35.8	36.5	37.2	37.9	38.6	
	45	25.1	26.2	27.3	28.4	29.5	30.1	30.7	31.3	32.0	32.6	33.2	33.9	34.5	35.2	35.8	
<b>PAKCOLD 40 KM</b>	25	41.0	42.7	44.3	46.1	47.8	48.7	49.7	50.6	51.5	52.5	53.5	54.5	55.5	56.5	57.5	
	30	38.7	40.3	41.9	43.5	45.2	46.1	47.0	47.9	48.8	49.7	50.7	51.6	52.6	53.5	54.5	
	35	36.3	37.8	39.3	40.9	42.5	43.4	44.2	45.1	45.9	46.8	47.7	48.6	49.5	50.5	51.4	
	40	33.8	35.2	36.6	38.1	39.7	40.5	41.3	42.1	42.9	43.8	44.6	45.5	46.4	47.2	48.2	
	45	31.1	32.4	33.8	35.2	36.7	37.4	38.2	39.0	39.8	40.6	41.4	42.2	43.0	43.5	44.7	
<b>PAKCOLD 45 KM</b>	25	46.0	47.9	50.0	52.1	54.2	55.3	56.5	57.6	58.8	59.9	61.1	62.4	63.6	64.8	66.1	
	30	42.6	44.5	46.4	48.4	50.4	51.5	52.5	53.6	54.7	55.8	56.9	58.1	59.2	60.4	61.6	
	35	39.2	41.0	42.8	44.6	46.5	47.5	48.5	49.5	50.6	51.6	52.7	53.7	54.8	55.9	57.1	
	40	35.9	37.6	39.2	41.0	42.8	43.7	44.6	45.5	46.5	47.5	48.5	49.5	50.5	51.5	52.6	
	45	33.0	34.5	36.0	37.6	39.3	40.1	41.0	41.8	42.7	43.6	44.5	45.5	46.4	47.4	48.3	
<b>PAKCOLD 55 KM</b>	25	54.9	57.0	59.6	61.5	63.9	65.1	66.3	67.6	68.8	70.1	71.4	72.7	74.0	75.3	76.7	
	30	51.8	53.9	56.0	58.2	60.5	61.7	62.8	64.0	65.2	66.5	67.7	69.0	70.2	71.5	72.8	
	35	48.6	50.6	52.6	54.7	56.9	58.0	59.2	60.3	61.5	62.7	63.9	65.1	66.3	67.6	68.8	
	40	45.2	47.1	49.1	51.1	53.2	54.3	55.4	56.5	57.6	58.7	59.9	61.0	62.2	63.4	64.6	
	45	41.7	43.5	45.4	47.3	49.3	50.4	51.4	52.4	53.5	54.6	55.7	56.8	57.9	59.1	60.3	
<b>PAKCOLD 61 KM</b>	25	68.6	71.4	74.3	77.2	80.3	81.9	83.5	85.1	86.7	88.4	90.0	91.7	93.5	95.2	97.0	
	30	64.2	66.9	69.6	72.5	75.4	76.9	78.4	80.0	81.5	83.1	84.7	86.3	88.0	89.7	91.4	
	35	59.7	62.3	64.9	67.6	70.4	71.8	73.3	74.7	76.2	77.7	79.3	80.8	82.4	84.0	85.6	
	40	55.2	57.6	60.1	62.7	65.3	66.7	68.1	69.4	70.9	72.3	73.7	75.2	76.7	78.2	79.8	
	45	50.6	52.9	55.3	57.7	60.2	61.5	62.8	64.1	65.4	66.8	68.1	69.5	71.0	72.4	73.9	
<b>PAKCOLD 74 KM</b>	25	83.5	86.5	90.0	94.0	97.5	99.5	101.5	103.5	105.5	107.5	109.5	111.5	113.5	116.0	118.0	
	30	78.5	83.0	85.0	88.5	92.0	94.0	96.0	97.5	99.5	101.5	103.5	105.5	107.5	109.5	112.0	
	35	73.5	76.5	80.0	83.0	86.5	88.5	90.0	92.0	93.5	95.5	97.5	99.5	101.5	103.0	105.0	
	40	68.0	71.0	74.0	77.0	80.5	82.0	84.0	85.5	87.5	89.0	91.0	92.5	94.5	96.5	96.5	
	45	61.5	64.5	67.5	70.5	74.0	75.5	77.0	78.5	80.5	82.0	84.0	85.5	87.5	89.0	91.0	
<b>PAKCOLD 82 KM</b>	25	88.2	91.9	95.8	99.7	103.8	105.9	108.1	110.2	112.4	114.6	116.9	119.2	121.5	123.9	126.4	
	30	82.2	85.7	89.4	93.1	97.0	99.0	101.0	103.1	105.1	107.3	109.4	111.6	113.8	116.0	118.3	
	35	76.2	79.5	83.0	86.5	90.2	92.1	94.0	95.9	97.9	99.9	101.9	104.0	106.1	108.2	110.3	
	40	70.2	73.3	76.6	79.9	83.4	85.2	87.0	88.8	90.7	92.5	94.5	96.4	98.4	100.4	102.4	
	45	64.3	67.3	70.3	73.4	76.7	78.3	80.0	81.7	83.5	85.2	87.0	88.8	90.7	92.6	-	
<b>PAKCOLD 94 KM</b>	25	100.4	104.8	109.2	113.8	118.6	121.0	123.5	126.0	128.5	131.1	133.7	136.4	139.1	141.8	144.6	
	30	93.2	97.3	101.6	105.9	110.4	112.7	115.1	117.4	119.8	122.3	124.8	127.3	129.9	132.5	135.1	
	35	85.9	89.8	93.8	97.9	102.1	104.3	106.5	108.7	111.0	113.3	115.7	118.1	120.5	122.9	125.4	
	40	78.6	82.2	85.9	89.7	93.7	95.7	97.8	99.9	102.1	104.2	106.4	108.7	110.9	113.2	115.6	
	45	71.2	74.5	78.0	81.5	85.2	87.1	89.1	91.0	93.0	95.0	97.1	99.2	101.3	103.4	-	
<b>PAKCOLD 110 KM</b>	25	118.0	123.0	128.1	133.4	138.9	141.7	144.5	147.5	150.3	153.3	156.3	159.4	162.5	165.6	168.8	
	30	110.3	115.0	119.9	125.0	130.5	132.8	135.5	138.2	141.0	143.8	146.7	149.6	152.5	155.5	158.6	
	35	102.6	107.1	111.7	116.5	121.4	123.9	126.4	129.0	131.7	134.3	137.1	139.8	142.6	145.4	148.3	
	40	95.0	99.2	103.5	108.0	112.6	115.0	117.4	119.9	122.3	124.9	127.4	130.0	132.7	135.4	138.1	
	45	87.4	91.4	95.4	99.6	104.0	106.2	108.5	110.5	113.1	115.5	—	—	—	—	—	

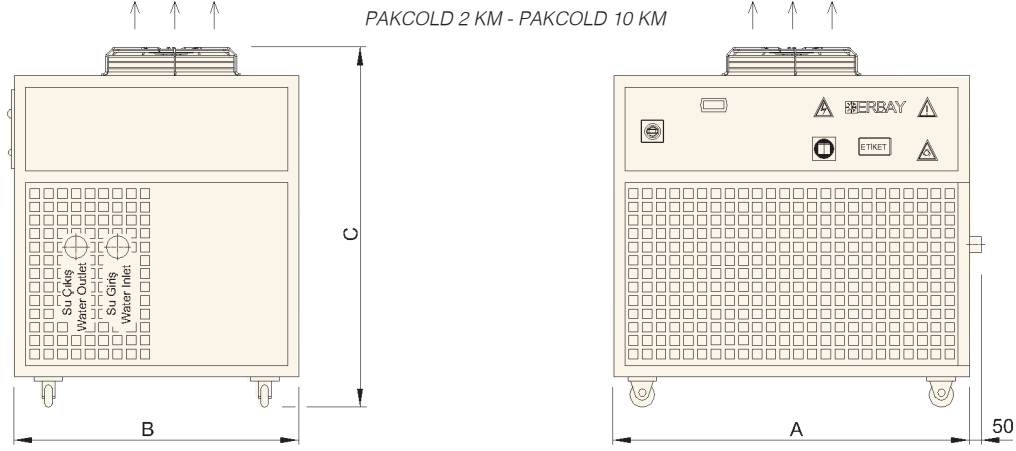
**Kapasite Tablosu** *Capacity Table (kW)*
**R22**

TİP TYPE	Dış Hava Sic. Ambient Temp. °C	Su Çıkış Sıcaklığı / Chilled Water Leaving Temperature °C															
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
<b>PAKCOLD 2 KM</b>	25	1.87	1.95	2.03	2.11	2.19	2.23	2.27	2.31	2.36	2.40	2.44	2.49	2.53	2.57	2.62	
	30	1.73	1.81	1.88	1.96	2.04	2.08	2.12	2.16	2.20	2.24	2.28	2.32	2.36	2.40	2.45	
	35	1.59	1.67	1.74	1.81	1.89	1.92	1.96	2.00	2.04	2.08	2.11	2.15	2.19	2.23	2.27	
	40	1.45	1.52	1.59	1.66	1.73	1.77	1.80	1.83	1.87	1.90	1.94	1.98	2.02	2.06	2.09	
	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>PAKCOLD 3 KM</b>	25	2.87	2.99	3.11	3.23	3.36	3.42	3.49	3.55	3.62	3.68	3.75	3.82	3.89	3.95	4.02	
	30	2.70	2.81	2.93	3.05	3.17	3.23	3.29	3.35	3.41	3.47	3.54	3.60	3.67	3.74	3.81	
	35	2.53	2.63	2.74	2.86	2.97	3.03	3.09	3.15	3.21	3.27	3.33	3.39	3.46	3.52	3.58	
	40	2.35	2.45	2.56	2.66	2.77	2.82	2.88	2.94	3.00	3.05	3.11	3.17	3.23	3.29	3.36	
	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>PAKCOLD 4,5 KM</b>	25	4.20	4.37	4.54	4.72	4.91	5.00	5.09	5.19	5.29	5.38	5.48	5.58	5.68	5.78	5.89	
	30	3.99	4.15	4.32	4.48	4.65	4.74	4.83	4.92	5.01	5.10	5.19	5.28	5.38	5.47	5.57	
	35	3.78	3.93	4.08	4.24	4.40	4.48	4.56	4.64	4.73	4.81	4.90	4.98	5.07	5.16	5.25	
	40	3.57	3.70	3.85	3.99	4.14	4.21	4.29	4.36	4.44	4.52	4.60	4.68	4.76	4.84	4.92	
	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>PAKCOLD 6 KM</b>	25	5.81	6.07	6.34	6.61	6.90	7.04	7.19	7.34	7.49	7.64	7.79	7.94	8.10	8.26	8.42	
	30	5.34	5.59	5.84	6.10	6.37	6.50	6.64	6.78	6.92	7.06	7.21	7.35	7.50	7.65	7.80	
	35	4.89	5.12	5.36	5.60	5.85	5.98	6.11	6.24	6.37	6.50	6.64	6.77	6.91	7.05	7.19	
	40	4.44	4.66	4.88	5.11	5.34	5.46	5.58	5.70	5.83	5.95	6.08	6.20	6.33	6.46	6.60	
	45	4.00	4.20	4.41	4.62	4.84	4.95	5.06	5.17	5.29	5.41	5.52	5.64	5.76	5.88	6.12	
<b>PAKCOLD 8 KM</b>	25	8.1	8.4	8.7	9.0	9.3	9.4	9.6	9.8	9.9	10.1	10.2	10.4	10.5	10.7	10.8	
	30	7.7	8.0	8.3	8.6	8.9	9.0	9.2	9.3	9.4	9.6	9.8	9.9	10.1	10.2	10.4	
	35	7.3	7.6	7.8	8.1	8.4	8.5	8.7	8.8	8.9	9.1	9.3	9.4	9.6	9.7	9.9	
	40	6.9	7.1	7.3	7.6	7.9	8.0	8.2	8.3	8.4	8.6	8.8	8.9	9.0	9.2	9.4	
	45	6.4	6.7	7.0	7.2	7.4	7.6	7.8	7.8	7.9	8.1	8.3	8.4	8.5	8.7	8.8	
<b>PAKCOLD 10 KM</b>	25	11.1	11.5	11.9	12.4	12.8	13.0	13.2	13.4	13.6	13.8	14.1	14.3	14.5	14.7	15.0	
	30	10.6	11.0	11.4	11.8	12.2	12.4	12.6	12.8	13.0	13.2	13.5	13.7	13.9	14.1	14.3	
	35	10.1	10.4	10.8	11.2	11.6	11.8	12.0	12.2	12.4	12.6	12.8	13.0	13.2	13.4	13.6	
	40	9.6	9.9	10.1	10.6	11.0	11.2	11.3	11.5	11.7	11.9	12.1	12.3	12.5	12.7	12.9	
	45	8.9	9.3	9.7	10.0	10.2	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.1	12.3	
<b>PAKCOLD 16 KM</b>	25	15.7	16.3	16.8	17.4	18.0	18.3	18.6	18.9	19.2	19.5	19.8	20.1	20.5	20.8	21.1	
	30	15.0	15.5	16.0	16.6	17.1	17.4	17.7	18.0	18.3	18.6	18.9	19.2	19.6	19.9	20.2	
	35	14.2	14.7	15.2	15.7	16.2	16.5	16.8	17.1	17.4	17.7	18.0	18.3	18.5	18.9	19.2	
	40	13.4	13.9	14.4	14.9	15.4	15.65	15.9	16.2	16.5	16.7	17.0	17.3	17.6	17.9	18.1	
	45	12.6	13.0	13.5	14.0	14.5	14.8	15.1	15.3	15.6	15.8	16.0	16.3	16.6	16.9	17.1	
<b>PAKCOLD 22 KM</b>	25	23.7	24.5	25.4	26.3	27.2	27.6	28.1	28.6	29.0	29.5	30.0	30.5	31.0	31.5	32.0	
	30	22.5	23.3	24.1	25.0	25.8	26.3	26.7	27.2	27.6	28.1	28.6	29.0	29.5	30.0	30.5	
	35	21.3	22.1	22.8	23.7	24.5	24.9	25.3	25.8	26.2	26.7	27.1	27.6	28.0	28.5	29.0	
	40	20.0	20.8	21.5	22.3	23.1	23.5	23.9	24.4	24.8	25.2	25.6	26.1	26.5	27.0	27.4	
	45	18.8	19.5	20.2	21.0	21.7	22.1	22.5	22.9	23.3	23.8	24.2	24.6	25.0	25.4	25.9	
<b>PAKCOLD 27 KM</b>	25	28.4	29.4	30.5	31.5	32.6	33.2	33.7	34.3	34.8	35.4	36.0	36.6	37.2	37.8	38.4	
	30	27.0	28.0	29.0	30.0	31.0	31.5	32.1	32.6	33.2	33.7	34.3	34.8	35.4	36.0	36.6	
	35	25.5	26.5	27.4	28.4	29.4	29.9	30.4	30.9	31.5	32.0	32.5	33.1	33.6	34.2	34.8	
	40	24.0	24.9	25.9	26.8	27.7	28.2	28.7	29.2	29.7	30.2	30.8	31.3	31.8	32.4	32.9	
	45	22.5	23.4	24.3	25.2	26.1	26.6	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	

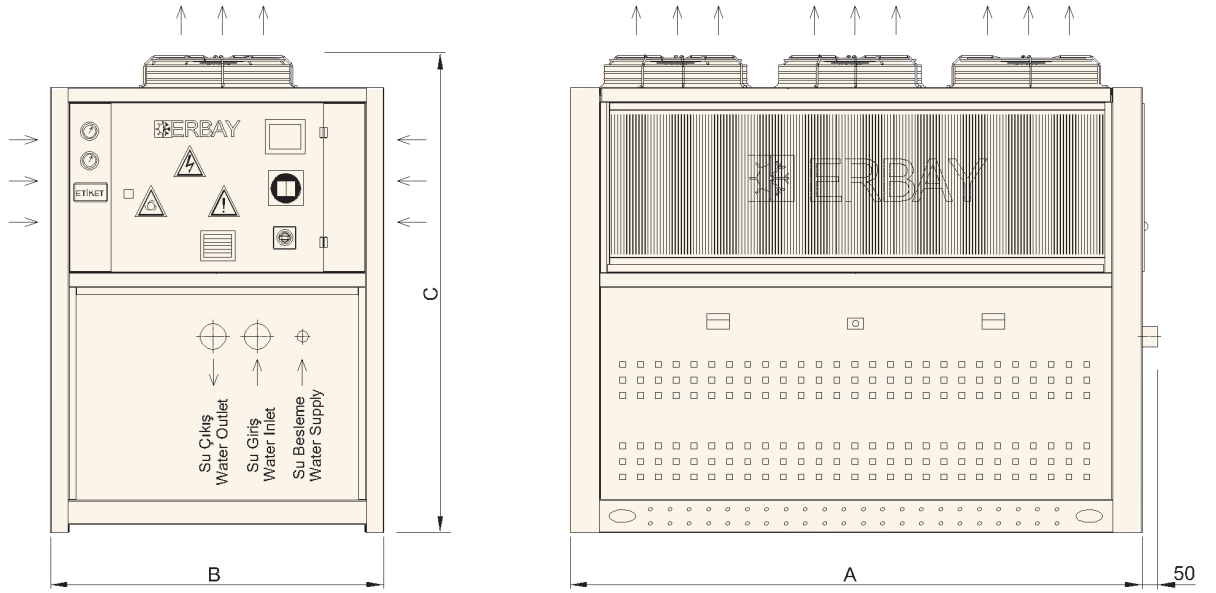
**Kapasite Tablosu Capacity Table (kW)**
**R22**

TİP TYPE	Dış Hava Sic. Ambient Temp. °C	Su Çıkış Sıcaklığı / Chilled Water Leaving Temperature °C															
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
<b>PAKCOLD 30 KM</b>	25	34.1	35.3	36.6	37.8	39.1	39.8	40.5	41.1	41.8	42.5	43.2	43.9	44.6	45.4	46.1	
	30	32.4	33.6	34.7	36.0	37.2	37.8	38.5	39.1	39.8	40.5	41.1	41.8	42.5	43.2	43.9	
	35	30.6	31.8	32.9	34.1	35.3	35.9	36.5	37.1	37.7	38.4	39.0	39.7	40.4	41.0	41.7	
	40	28.9	29.9	31.0	32.2	33.3	33.9	34.5	35.1	35.7	36.3	36.9	37.6	38.2	38.8	39.5	
	45	27.1	28.1	29.1	30.2	31.3	31.9	32.5	33.0	33.6	34.2	34.8	35.4	36.0	36.6	37.3	
<b>PAKCOLD 40 KM</b>	25	42.6	44.2	45.8	47.4	49.0	49.9	50.7	51.6	52.5	53.4	54.3	55.2	56.1	57.0	58.0	
	30	40.6	42.1	43.6	45.2	46.8	47.6	48.4	49.3	50.1	51.0	51.9	52.7	53.6	54.5	55.5	
	35	38.5	39.9	41.4	42.9	44.5	45.3	46.1	46.9	47.7	48.5	49.4	50.2	51.1	52.0	52.8	
	40	36.3	37.7	39.1	40.6	42.1	42.8	43.6	44.4	45.2	46.0	46.8	47.6	48.4	49.3	50.1	
	45	34.0	35.3	36.7	38.1	39.5	40.2	41.0	41.7	42.5	43.3	44.0	44.8	45.6	46.4	47.2	
<b>PAKCOLD 45 KM</b>	25	49.4	51.4	53.4	55.4	57.5	58.6	59.7	60.8	61.9	63.1	64.2	65.4	66.6	67.8	69.0	
	30	46.3	48.2	50.1	52.0	54.1	55.1	56.1	57.2	58.3	59.3	60.4	61.5	62.7	63.8	65.0	
	35	43.3	45.0	46.8	48.7	50.6	51.6	52.5	53.5	54.6	55.6	56.6	57.7	58.8	59.8	60.9	
	40	40.3	42.0	43.7	45.4	47.2	48.1	49.0	50.0	50.9	51.9	52.9	53.9	54.9	55.9	57.0	
	45	37.5	39.1	40.6	42.3	44.0	44.8	45.7	46.6	47.5	48.4	49.3	50.2	51.2	52.1	53.1	
<b>PAKCOLD 55 KM</b>	25	55.2	57.1	59.2	61.2	63.4	64.5	65.6	66.7	67.9	69.1	70.2	71.4	72.7	73.9	75.1	
	30	52.8	54.7	56.6	58.6	60.7	61.8	62.8	63.9	65.0	66.1	67.3	68.4	69.6	70.8	72.0	
	35	50.0	52.0	54.0	55.9	57.9	59.0	60.0	61.0	62.1	63.2	64.3	65.4	66.5	67.6	68.8	
	40	47.3	49.1	51.0	52.9	54.9	55.9	56.9	57.9	59.0	60.0	61.1	62.2	63.3	64.4	65.5	
	45	43.9	45.7	47.6	49.5	51.5	52.5	53.5	54.5	55.5	56.5	57.6	58.6	59.7	60.8	61.9	
<b>PAKCOLD 61 KM</b>	25	68.5	71.0	73.5	76.0	79.0	80.5	82.0	83.5	85.0	86.5	88.0	89.5	91.0	92.5	94.0	
	30	65.0	67.5	70.0	72.5	75.5	77.0	78.0	79.5	81.0	82.5	84.0	85.5	87.0	88.5	90.0	
	35	61.5	64.0	66.5	69.0	71.5	73.0	74.0	75.5	77.0	78.5	80.0	81.5	82.5	84.0	85.5	
	40	57.5	60.0	62.5	65.0	67.5	68.5	70.0	71.5	72.5	74.0	75.5	77.0	78.0	79.5	81.0	
	45	53.5	56.0	58.0	60.5	63.6	64.5	65.5	67.0	68.0	69.5	71.0	72.0	73.5	75.0	76.5	
<b>PAKCOLD 74 KM</b>	25	84.5	87.5	90.5	93.5	96.5	98.0	99.5	101.5	103.0	104.5	106.5	108.0	110.0	111.5	113.5	
	30	80.5	83.5	86.5	89.5	92.6	94.0	95.5	97.5	99.0	100.5	102.0	104.0	105.5	107.0	109.0	
	35	76.5	79.5	82.5	85.5	88.5	90.0	91.5	93.0	94.5	96.0	97.5	99.5	101.0	102.5	104.0	
	40	72.5	75.0	78.0	81.0	83.5	85.0	86.5	88.0	89.5	91.5	93.0	94.5	96.0	97.5	99.0	
	45	67.5	70.5	73.0	76.0	78.5	80.0	81.5	83.0	84.5	86.0	87.5	89.0	90.5	92.5	94.0	
<b>PAKCOLD 82 KM</b>	25	93.8	97.5	101.3	105.2	109.2	111.3	113.3	115.4	117.6	119.7	121.2	124.1	126.4	128.6	130.9	
	30	89.0	92.5	96.2	99.9	103.8	105.7	107.7	109.7	111.8	113.8	115.9	118.1	120.2	122.4	124.6	
	35	84.2	87.6	91.1	94.7	98.4	100.3	102.2	104.1	106.1	108.1	110.1	112.2	114.2	116.3	118.5	
	40	79.5	82.7	86.1	89.5	93.1	94.9	96.7	98.6	100.5	102.4	104.3	106.3	108.3	110.3	112.4	
	45	74.8	77.9	81.1	84.4	87.8	89.5	91.3	93.1	94.6	96.7	98.6	100.5	102.4	104.4	106.3	
<b>PAKCOLD 94 KM</b>	25	107.5	111.8	116.1	120.6	125.2	127.6	130.0	132.4	134.8	137.3	139.8	142.4	145.0	147.6	150.2	
	30	101.9	106.0	110.1	114.4	118.9	121.1	123.4	125.7	128.1	130.5	132.9	135.3	137.8	140.3	142.9	
	35	96.5	100.3	104.3	108.5	112.7	114.9	117.1	119.3	121.5	123.8	126.1	128.5	130.9	133.3	135.7	
	40	91.1	94.8	98.7	102.6	106.7	108.7	110.8	113.0	115.1	117.3	119.5	121.8	124.1	126.4	128.7	
	45	85.9	89.5	93.1	96.9	100.7	102.7	104.7	106.8	108.8	110.9	113.0	115.2	117.4	119.6	121.9	
<b>PAKCOLD 110 KM</b>	25	124.9	129.8	134.8	140.0	145.3	148.0	150.8	153.6	156.4	159.3	162.2	165.1	168.1	171.1	174.2	
	30	118.5	123.2	128.1	133.0	138.1	140.7	143.4	146.0	148.8	151.5	154.3	157.1	160.0	162.9	165.8	
	35	112.3	116.8	121.4	126.1	131.0	133.5	136.0	138.9	141.2	143.8	146.5	149.2	152.0	154.8	157.6	
	40	106.1	110.4	114.8	119.4	124.1	126.5	128.9	131.3	133.8	136.4	138.9	141.5	144.2	146.8	149.5	
	45	100.2	104.3	108.5	112.8	117.3	119.6	121.9	124.2	126.6	129.0	131.5	134.0	136.5	139.1	141.7	

## Boyutlar Dimensions



PAKCOLD 16 KM - PAKCOLD 110 KM



TİP / TYPE	PAKCOLD 2 KM	PAKCOLD 3 KM	PAKCOLD 4-5 KM	PAKCOLD 6 KM	PAKCOLD 8 KM	PAKCOLD 10 KM	PAKCOLD 16 KM	PAKCOLD 22 KM	PAKCOLD 27 KM	PAKCOLD 30 KM	PAKCOLD 40 KM	PAKCOLD 45 KM	PAKCOLD 55 KM	PAKCOLD 61 KM	PAKCOLD 74 KM	PAKCOLD 82 KM	PAKCOLD 94 KM	PAKCOLD 110 KM
A	650	650	650	950	950	950	1350	1650	1650	1650	1750	1750	2050	2200	2200	2300	2400	2500
B	700	700	700	800	800	800	950	950	950	1100	1100	1100	1150	1150	1250	1250	1250	1250
C	1030	1060	1100	1195	1195	1210	1625	1595	1595	1695	1795	1825	1745	1775	1975	2110	2210	2260
SU GİRİŞİ WATER INLET	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	3"
SU ÇIKIŞI WATER OUTLET	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	3"

Not:

1. Ölçü ve dizayn değiştirme hakkımız mahfuzdur.
2. Pakcold cihazı ile tesis arasındaki basınç kayıplarının siparişle birlikte bildirilmesi gereklidir.
3. Pakcold cihazları standart olarak hava soğutmalı kondenserli imal edilmektedir, istenildiği takdirde su soğutmalı kondenserli olarakta imal edilebilir.
4. Daha büyük kapasiteli veya değişik çalışma şartlarındaki cihazlar için şirketimizle temasa geçiniz.

Note:

1. We reserve the right to make changes in dimensions and design at any time, without notice.
2. Pressure losses between the chiller and the plant must be informed with order.
3. Pakcolds are manufactured with air cooled condensers in a standart range, devices can be manufactured with water cooled condenser if desired.
4. For bigger capacities and different working conditions please contact to us.