

DANFOSS H SERİSİ SCROLL KOMPRESÖRLER

R404A / R507 - R407C - R134A

MODEL	KOD NO	Btu. 50 Hz.	DİSP. CC	NOMİNAL GÜÇ	VOLTAJ	EMME BASMA		ÇALIŞMA REJİMİ	YAĞ MİKTARI
HRP034 T5LP6	120U2019	28.333	46,21	2,8 Hp	220 V	3/4"	1/2"	+15°C / -20 °C (MBP)	1,06 LT
HRP034 T4LP6	120U2024	28.333	46,21	2,8 Hp	380 V / 400V 50HZ 460V 60HZ	3/4"	1/2"		1,06 LT
HRP040 T4LP6	120U1016	33.333	54,4	3,3 Hp		3/4"	1/2"		1,06 LT
HRP048 T4LP6	120U1656	38.400	64,4	4 Hp		7/8"	1/2"		1,57 LT
HRP060 T4LP6	120U1726	48.000	80,95	5 Hp		7/8"	1/2"		1,57 LT
HLP072 T4LC6	120U1756	57.600	98,65	6 Hp		7/8"	1/2"		1,57 LT
HLP081 T4LC6	120U1781	64.800	110,94	6,5 Hp		7/8"	3/4"		1,57 LT
HCP094 T4LC6	120U0601	75.200	126,02	8 Hp		11/8"	7/8"		2,66 LT
HCP109 T4LC6	120U0376	87.200	148,79	9 Hp		11/8"	7/8"		2,66 LT
HCP120 T4LC6	120U0401	96.000	162,4	10 Hp		11/8"	7/8"		2,66 LT

DANFOSS H SERİSİ TANDEM KOMPRESÖRLER

HRP048 T4LC8	120U1661	38.400	64,4	4 Hp	380 V / 400V 50HZ 460V 60HZ	7/8"	1/2"	+15°C / -20 °C (MBP)	1,57 LT
HRP060 T4LC8	120U1731	48.000	80,95	5 Hp		7/8"	1/2"		1,57 LT
HLP072 T4LC8	120U2072	57.600	98,65	6 Hp		7/8"	1/2"		1,57 LT
HLP081 T4LC8	120U1786	64.800	110,94	6,5 Hp		7/8"	3/4"		1,57 LT
HCP094 T4LC8	120U0611	75.200	126,02	8 Hp		11/8"	7/8"		2,66 LT
HCP109 T4LC8	120U0386	87.200	148,79	9 Hp		11/8"	7/8"		2,66 LT
HCP120 T4LC8	120U0411	96.000	162,4	10 Hp		11/8"	7/8"		2,66 LT

* Kompresörler kaynak bağlantılıdır.

Model	Voltaj	Evaporasyon								
		Kondenzasyon								
		-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	+5 °C	+10 °C	
HRP034 T5LP6		40 °C	2.002	2.695	3.496	4.430	5.523	6.802	8.292	10.020
		50 °C	-	-	2.987	3.818	4.795	5.944	7.290	8.859
HRP034 T4LP6		40 °C	2.129	2.759	3.518	4.424	5.496	6.749	8.203	9.874
		50 °C	-	-	2.976	3.779	4.727	5.838	7.130	8.620
HRP040 T4LP6		40 °C	2.445	3.169	4.041	5.082	6.313	7.753	9.423	11.340
		50 °C	-	-	3.416	4.338	5.426	6.702	8.185	9.896
HRP048 T4LP6		40 °C	2.971	3.846	4.902	6.165	7.658	9.406	11.430	13.760
		50 °C	-	-	4.160	5.279	6.603	8.155	9.961	12.040
HRP060 T4LP6		40 °C	3.726	4.801	6.110	7.681	9.544	11.730	14.260	17.180
		50 °C	-	-	55.232	6.612	8.530	10.180	12.430	15.030
HLP072 T4LC6		40 °C	4.746	6.111	7.753	9.719	12.060	14.810	18.030	21.770
		50 °C	-	-	6.529	8.148	10.100	12.420	15.170	18.390
HLP081 T4LC6		40 °C	5.051	6.454	8.190	10.290	12.790	15.710	19.100	22.970
		50 °C	-	-	7.237	9.130	11.400	14.080	17.210	20.810
HCP094 T4LP6		40 °C	5.720	7.374	9.387	11.800	14.660	18.010	21.890	26.340
		50 °C	-	-	8.068	10.220	12.780	15.780	19.280	23.300
HCP109 T4LC6		40 °C	7.254	8.949	11.290	14.240	17.750	21.780	26.280	31.210
		50 °C	-	-	9.893	12.300	15.360	19.030	23.270	28.030
HCP120 T4LC6		40 °C	8.045	9.902	12.450	15.640	19.460	23.860	28.820	34.300
		50 °C	-	-	10.870	13.410	16.670	20.620	25.250	30.500

DANFOSS H SERİSİ R410A SCROLL KOMPRESÖRLER

MODEL	Kod No	DISP. CC	NOMİNAL GÜÇ	VOLTAJ	EMME BASMA	Btu. 50 Hz.	ÇALIŞMA REJİMİ	YAĞ MİKTARI
HRH 036 U4LP6	120U1201	34,74	3 Hp	380 V / 400V 50HZ 460V 60HZ	3/4" 1/2"	30.000	+15°C / +20 °C (MBP)	1,06 LT
HRH 040 U4LP6	120U1211	39,64	3,3 Hp		7/8" 1/2"	33.300		1,33 LT
HRH 044 U4LP6	120U1361	42,61	3,7 Hp		7/8" 1/2"	36.600		1,57 LT
HRH 054U4LP6	120U1376	52,11	4,5 Hp		7/8" 1/2"	45.000		1,57 LT
HLH 061 U4LP6	120U2052	57,78	5,1 Hp		7/8" 1/2"	50.800		1,57 LT
HLJ 072 U4LP6	120U1396	67,97	6 Hp		7/8" 1/2"	60.000		1,57 LT
HLJ 083 U4LP6	120U1401	78,08	7 Hp		7/8" 1/2"	70.000		1,57 LT

* Kompresörler kaynak bağlantılıdır.

*R410a *Watt

H serisi - R22/R407C/R410A - 50 Hz - Scroll kompresörler

Teknik veriler

MODEL	Nominal	Nominal soğutma		Güç girişi	A maks.	Verimlili k		Süpürme hacmi	Silindir hacmi	Yağ şarjı	Net ağırlık
	[TR]	[W]	[Btu/sa.]	[kW]	[A]	COP W/W	EER Btu/sa./W	[cm ³ /dev.]	[m ³ /sa.]	[dm ³]	[kg]
HRM025T4	2,1	5900	20300	1,86	7	3,20	10,93	33,77	5,88	1,06	31
HRM032T4	2,7	7800	26800	2,35	9,5	3,34	11,40	43,43	7,56	1,06	31
HRM032U4	2,7	7800	26800	2,55	9,5	3,08	10,52	43,59	7,58	1,06	31
HRM034T4	2,8	8200	28000	2,50	9,5	3,28	11,20	46,24	8,05	1,06	31
HRM034U4	2,8	8300	28500	2,66	9,5	3,14	10,72	46,21	8,04	1,06	31
HRM038T4	3,2	9200	31500	2,78	10	3,31	11,30	51,67	8,99	1,06	31
HRM038U4	3,2	9200	31500	2,95	10	3,14	10,72	51,62	8,98	1,06	31
HRM040T4	3,3	9600	32900	2,88	10	3,34	11,40	54,39	9,46	1,06	31
HRM040U4	3,3	9700	33100	2,98	10	3,25	11,10	54,4	9,47	1,06	31
HRM042T4	3,5	10100	34500	3,08	11	3,28	11,20	57,11	9,94	1,06	31
HRM042U4	3,5	10200	34800	3,13	11	3,25	11,10	57,19	9,95	1,06	31
HRM045U4	3,8	10900	37300	3,45	12	3,17	10,82	61,45	10,69	1,33	31
HRM047T4	3,9	11500	39300	3,46	12	3,33	11,37	64,07	11,15	1,33	31
HRM047U4	3,9	11500	39300	3,57	12	3,22	10,99	64,07	11,15	1,33	31
HRM048U4	4,0	11500	39300	3,57	12,5	3,22	10,99	64,4	11,21	1,57	37
HRM051T4	4,3	12400	42300	3,67	13	3,37	11,51	68,83	11,98	1,57	37
HRM051U4	4,3	12800	43700	3,83	13	3,34	11,40	68,83	11,98	1,57	37
HRM054T4	4,5	13300	45400	3,84	12,5	3,46	11,81	72,84	12,67	1,57	37
HRM054U4	4,5	13400	45700	3,97	13	3,37	11,51	72,92	12,69	1,57	37
HRM058U4	4,8	14300	49000	4,25	15	3,37	11,51	78,17	13,60	1,57	37
HRM060T4	5,0	14600	49700	4,29	15	3,40	11,61	80,95	14,09	1,57	37
HRM060U4	5,0	14800	50600	4,40	15	3,37	11,51	80,95	14,09	1,57	37
HLM068T4	5,7	16900	57600	5,01	15	3,37	11,51	93,08	16,20	1,57	37
HLM072T4	6,0	17800	60900	5,29	15	3,37	11,51	98,57	17,15	1,57	37
HLM075T4	6,3	18400	62900	5,37	16	3,43	11,71	102,75	17,88	1,57	37
HLM078T4	6,5	19400	66400	5,81	16	3,34	11,40	107,48	18,70	1,57	37
HLM081T4	6,8	20000	68400	5,94	17	3,37	11,51	110,94	19,30	1,57	37
HCM094T4	7,8	23100	78700	6,80	21	3,39	11,57	126,02	21,93	2,66	44

	HCM109T4	9,1	26700	91100	7,77	24	3,43	11,71	148,79	25,89	2,66	45
	HCM120T4	10,0	29000	99100	8,85	25	3,28	11,20	162,4	28,26	2,66	45
R407C	HRP025T4	2,1	5700	19600	1,86	7	3,08	10,52	33,77	5,88	1,06	31
	HRP034T4	2,8	7900	27100	2,68	9,5	2,96	10,11	46,21	8,04	1,06	31
	HRP038T4	3,2	8800	30200	2,82	11	3,14	10,72	51,62	8,98	1,06	31
	HRP040T4	3,3	9100	31100	3,14	11,5	2,90	9,90	54,4	9,47	1,06	31
	HRP042T4	3,5	9600	32700	3,30	10	2,90	9,90	57,19	9,95	1,06	31
	HRP045T4	3,8	10800	36900	3,58	12	3,02	10,31	61,45	10,69	1,33	31
	HRP047T4	3,9	11100	38000	3,69	12	3,02	10,31	64,07	11,15	1,33	31
	HRP048T4	4,0	11100	37900	3,35	12	3,31	11,30	64,4	11,21	1,57	37
	HRP051T4	4,3	12100	41400	3,83	13	3,17	10,82	68,83	11,98	1,57	37
	HRP054T4	4,5	12600	42900	3,97	12,5	3,17	10,82	72,76	12,66	1,57	37
	HRP058T4	4,8	13500	46000	4,25	14	3,17	10,82	78,17	13,60	1,57	37
	HRP060T4	5,0	13900	47300	4,26	15	3,25	11,10	80,95	14,09	1,57	37
	HLP068T4	5,7	15700	53600	5,10	15	3,08	10,52	93,08	16,20	1,57	37
	HLP072T4	6,0	16600	56700	5,30	15	3,14	10,72	98,65	17,17	1,57	37
	HLP075T4	6,3	18000	61600	5,54	16	3,25	11,10	102,75	17,88	1,57	37
	HLP078T4	6,5	19200	65500	5,83	16	3,29	11,23	107,48	18,70	1,57	37
	HLP081T4	6,8	19500	66500	5,99	17	3,25	11,10	110,94	19,30	1,57	37
	HCP094T4	7,8	21600	73700	6,63	21	3,25	11,10	126,02	21,93	2,66	44
	HCP109T4	9,1	26000	88900	7,93	24	3,28	11,20	148,79	25,89	2,66	45
	HCP120T4	10,0	28100	96100	8,88	25	3,17	10,82	162,4	28,26	2,66	45
R410A	HRH029U4	2,4	7100	24300	2,43	10	2,93	10,00	27,79	4,84	1,06	31
	HRH031U4	2,6	7500	25700	2,68	10	2,81	9,59	29,69	5,17	1,06	31
	HRH032U4	2,7	7700	26200	2,76	10	2,78	9,49	30,64	5,33	1,06	31
	HRH034U4	2,8	8500	29000	2,90	10	2,93	10,00	33,04	5,75	1,06	31
	HRH036U4	3,0	8800	30100	3,13	10	2,81	9,59	34,74	6,04	1,06	31
	HRH038U4	3,2	9300	31600	3,36	12	2,75	9,39	36,54	6,36	1,06	32
	HRH040U4	3,3	10200	34800	3,58	12	2,84	9,70	39,64	6,90	1,33	32
	HRH041U4	3,4	10000	34300	3,43	13	2,93	10,00	39,33	6,84	1,57	37
	HRH044U4	3,7	10800	36900	3,92	13,5	2,75	9,39	42,61	7,41	1,57	37
	HRH047U4	3,9	11300	38700	3,87	13	2,93	10,00	44,43	7,73	1,33	31
	HRH048U4	4,0	11900	40600	4,02	14	2,96	10,11	46,41	8,08	1,33	31
	HRH049U4	4,1	12100	41300	4,05	13,5	2,99	10,21	47,36	8,24	1,57	37
	HRH050U4	4,2	12400	42500	4,20	14	2,96	10,11	48,92	8,51	1,33	31
	HRH051U4	4,3	12900	43900	4,22	13	3,05	10,41	49,32	8,58	1,57	37
	HRH054U4	4,5	13300	45500	4,41	15	3,02	10,31	52,11	9,07	1,57	37
	HRH056U4	4,7	13800	47200	4,58	15	3,02	10,31	54,11	9,42	1,57	37
	HLH061T4	5,1	14800	50700	4,78	15	3,11	10,62	57,78	10,05	1,57	37
	HLH068T4	5,7	16900	57600	5,26	19	3,21	10,96	64,4	11,21	1,57	37
	HLJ072T4	6,0	17800	60900	5,56	19	3,21	10,96	67,97	11,83	1,57	37
	HLJ075T4	6,3	18600	63500	5,77	18	3,22	10,99	70,79	12,32	1,57	37
	HLJ083T4	6,9	20400	69700	6,27	19	3,25	11,10	78,08	13,59	1,57	37
	HCJ090T4	7,5	22300	76200	7,18	19	3,11	10,62	86,85	15,11	2,66	45
	HCJ105T4	8,8	26000	88700	8,21	25	3,17	10,82	101,6	17,68	2,66	45
	HCJ120T4	10,0	29600	101100	9,52	27	3,11	10,62	113,07	19,67	2,66	45

TR) Ton Soğutma.
COP) Performans Katsayısı.
EER) Enerji Verimliliği Oranı.

*) : ARI standart değer koşulları, 400
V/3 fazlı/50 Hz.

Buharlaştırma sıcaklığı: 7,2 °C. Yoğuşma sıcaklığı:
54,4 °C.
Superheat: 11.1 K.
Subcooling: 8,3 K.

Tür	Model Varyasyonu	Bağlantı	Özellikler	Kod no.					
				1	2	4	5	7	9
HRH029	U	P	6	120U2277	120U228 2	120U2287	-	-	-
HRH031	U	P	6	120U1136	120U125 1	120U1191	120U1166	120U1216	-
HRH032	U	P	6	120U1141	120U125 6	120U1196	120U1171	120U1221	-
HRH034	U	P	6	120U1146	120U126 1	120U2446	120U2650	120U1226	120U2654
HRH036	U	P	6	120U1151	120U126 6	120U1201	120U1176	120U1231	-
HRH038	U	P	6	120U1156	120U127 1	120U1206	120U1181	120U1236	120U2658
HRH039	U	P	6	120U2466	-	-	-	-	-
HRH040	U	P	6	120U1161	120U127 6	120U1211	120U1186	120U1241	-
HRH041	U	P	6	120U1281	120U145 1	120U1356	-	120U1406	-
	U	C	6	-	120U241 2	-	-	-	-
	U	C	8	-	120U240 7	120U2397	-	120U2402	-
HRH044	U	P	6	120U1286	120U145 6	120U1361	-	120U1411	-
HRH047	U	P	6	120U2362	-	-	-	-	-
HRH048	U	P	6	120U2582	-	-	-	-	-
HRH049	U	P	6	120U1291	120U146 1	120U1366	-	120U1416	-
	U	C	8	-	120U248 2	120U2474	-	120U2478	-
HRH050	U	P	6	120U2470	-	-	-	-	-
HRH051	U	P	6	120U1296	120U146 6	120U1371	120U1326	120U1421	-
HRH054	U	P	6	120U1301	120U147 1	120U1376	120U1331	120U1426	-
HRH056	U	C	6	-	-	120U1386	-	120U2237	-
	U	P	6	120U1306	120U147 6	120U1381	120U1336	120U1431	-
HLH061	T	C	6	-	120U206 2	120U2052	-	120U2057	120U2450
	T	P	6	120U2042	-	-	120U2047	-	-
	T	C	8	-	120U249 4	120U2486	-	120U2490	-
HLH068	T	C	6	-	120U148 1	120U1391	-	120U1436	-
	T	P	6	120U1311	-	-	120U1341	-	-
	T	C	8	-	120U242 7	120U2417	-	120U2422	-
HLJ072	T	C	6	-	120U148 6	120U1396	-	120U2037	-
	T	P	6	120U1316	-	-	120U1346	-	-
	T	C	8	-	120U217 7	120U2167	-	120U2498	-
HLJ075	T	C	6	-	120U227 2	120U2267	-	120U2262	-
	T	C	8	-	120U244 2	120U2432	-	120U2437	-
HLJ083	T	C	6	-	120U149 1	120U1401	-	120U1441	120U2387
	T	P	6	120U1321	-	-	120U1351	-	-
	T	C	8	-	120U218 2	120U2172	-	120U2502	-
HCJ090	T	C	6	-	120U230 7	120U2302	-	120U2312	-
	T	C	7	-	-	-	-	-	-
	T	C	8	-	-	120U2538	-	-	-
HCJ105	T	C	6	-	120U232 7	120U2322	-	120U2332	-
	T	C	7	-	-	-	-	-	-
	T	C	8	-	-	120U2578	-	-	-

HCJ120	T	C	6	-	120U234 7	120U2342	-	120U2352	-
	T	C	7	-	-	-	-	-	-
	T	C	8	-	120U257 0	120U2562	-	-	-
HRH029	U	P	6	120U2274	120U227 9	120U2284	-	-	-
HRH031	U	P	6	120U1133	120U124 8	120U1188	120U1163	120U1213	-
HRH032	U	P	6	120U1138	120U125 3	120U1193	120U1168	120U1218	-
HRH034	U	P	6	120U1143	120U125 8	120U2443	120U2647	120U1223	120U2651
HRH036	U	P	6	120U1148	120U126 3	120U1198	120U1173	120U1228	-
HRH038	U	P	6	120U1153	120U126 8	120U1203	120U1178	120U1233	-
HRH039	U	P	6	120U2463	-	-	-	-	-
HRH040	U	P	6	120U1158	120U127 3	120U1208	120U1183	120U1238	-
HRH041	U	P	6	120U1278	120U144 8	120U1353	-	120U1403	-
	U	C	6	-	120U240 9	-	-	-	-
	U	C	8	-	120U240 4	120U2394	-	120U2399	-
HRH044	U	P	6	120U1283	120U145 3	120U1358	-	120U1408	-
HRH047	U	P	6	120U2359	-	-	-	-	-
HRH048	U	P	6	120U2579	-	-	-	-	-
HRH049	U	P	6	120U1288	120U145 8	120U1363	-	120U1413	-
	U	C	8	-	120U247 9	120U2471	-	120U2475	-
HRH050	U	P	6	120U2467	-	-	-	-	-
HRH051	U	P	6	120U1293	120U146 3	120U1368	120U1323	120U1418	-
HRH054	U	P	6	120U1298	120U146 8	120U1373	120U1328	120U1423	-
HRH056	U	C	6	-	-	120U1383	-	120U2234	-
HRH056	U	P	6	120U1303	120U147 3	120U1378	120U1333	120U1428	-
HLH061	T	P	6	120U2039	-	-	120U2044	-	-
	T	C	6	-	120U205 9	120U2049	-	120U2054	120U2447
	T	C	8	-	120U249 1	120U2483	-	120U2487	-
HLH068	T	C	6	-	120U147 8	120U1388	-	120U1433	-
	T	C	8	-	120U242 4	120U2414	-	120U2419	-
	T	P	6	120U1308	-	-	120U1338	-	-
HLJ072	T	C	6	-	120U148 3	120U1393	-	120U2034	-
	T	C	8	-	120U217 4	120U2164	-	120U2495	-
	T	P	6	120U1313	-	-	120U1343	-	-
HLJ075	T	C	6	-	120U226 9	120U2264	-	120U2259	120U1443
	T	C	8	-	120U243 9	120U2429	-	120U2434	-
HLJ083	T	C	6	-	120U148 8	120U1398	-	120U1438	120U2384
	T	C	8	-	120U217 9	120U2169	-	120U2499	-
	T	P	6	120U1318	-	-	120U1348	-	-
HCJ090	T	C	6	-	120U230 4	120U2299	-	-	-
	T	C	7	-	120U253 9	120U2531	-	-	-
	T	C	8	-	-	-	-	-	-
	T	C	6	-	120U232 4	120U2319	-	120U2329	-
	T	C	7	-	120U254 7	120U2571	-	-	-

HCJ105		T	C	8	-	-	120U2575	-	-	-
HCJ120		T	C	6	-	120U2344	120U2339	-	120U2349	-
		T	C	7	-	-	120U2555	-	-	-
HRP034		T	P	6	-	-	120U2024	120U2019	-	-
HRP038		T	P	6	-	120U1086	120U1006	120U0961	-	-
HRP040		T	P	6	-	120U1096	120U1016	120U1929	-	-
HRP042		T	P	6	-	-	120U1026	-	-	-
HRP045		T	P	6	-	-	120U1036	120U0976	-	-
HRP047		T	P	6	-	120U1126	120U1046	120U0986	-	-
HRP048		T	C	8	-	-	120U1661	-	-	-
HRP048		T	P	6	-	-	120U1656	-	-	-
HRP051		T	P	6	120U1501	120U1861	120U1681	120U2192	120U1796	-
HRP054		T	P	6	-	-	120U1691	120U2197	120U1806	-
		T	C	8	-	-	120U2004	-	-	-
HRP058		T	C	8	-	-	120U1706	-	-	-
		T	P	6	-	-	120U1701	120U1596	120U1816	-
HRP060		T	C	8	-	-	120U1731	-	-	-
		T	P	6	-	120U2297	120U1726	120U1606	120U1826	-
HLP068		T	C	6	-	-	120U2014	-	-	-
		T	P	6	-	-	-	120U1621	-	-
HLP072		T	C	6	-	-	120U1756	-	-	-
		T	C	8	-	-	120U2072	-	-	-
		T	P	6	120U1571	-	-	120U1631	-	-
HLP075		T	C	6	-	-	120U1766	-	120U1841	-
		T	P	6	120U1581	-	-	120U1641	-	-
HLP078		T	C	6	-	120U2458	120U2454	-	-	-
HLP081		T	C	6	-	120U1916	120U1781	-	120U1851	-
		T	C	8	-	-	120U1786	-	-	-
		T	P	6	120U1591	-	-	120U1651	-	-
HCP094		T	C	6	-	120U0906	120U0601	-	-	-
		T	C	7	-	-	120U0606	-	-	-
		T	C	8	-	-	120U0611	-	-	-
HCP109		T	C	6	-	-	120U0376	-	-	-
		T	C	7	-	-	120U0381	-	-	-
		T	C	8	-	-	120U0386	-	-	-
HCP120		T	C	6	-	120U0766	120U0401	-	-	-
		T	C	7	-	-	120U0406	-	-	-
		T	C	8	-	-	120U0411	-	-	-
HRP034		T	P	6	-	-	120U2021	120U2016	-	-
HRP038		T	P	6	-	120U1083	120U1003	120U0958	-	-
HRP040		T	P	6	-	120U1093	120U1013	120U1926	-	-

HRP042		T	P	6	-	120U110 3	120U1023	-	-	-
HRP045		T	P	6	-	120U111 3	120U1033	-	-	-
HRP047		T	P	6	-	-	120U1043	120U0983	-	-
HRP048		T	C	8	-	-	120U1658	-	-	-
HRP048		T	P	6	-	-	120U1653	-	-	-
HRP051		T	P	6	120U1498	120U185 8	120U1678	120U2189	120U1793	-
HRP054		T	P	6	-	-	120U1688	120U2194	120U1803	-
		T	C	8	-	-	120U2001	-	-	-
HRP058		T	C	8	-	-	120U1703	-	-	-
		T	P	6	-	-	120U1698	120U1593	120U1813	-
HRP060		T	C	8	-	-	120U1728	-	-	-
		T	P	6	-	120U229 7	120U1723	120U1603	120U1823	-
HLP068		T	C	6	-	-	120U2011	-	-	-
		T	P	6	120U1558	-	-	120U1618	-	-
HLP072		T	C	6	-	-	120U1753	-	-	-
		T	C	8	-	-	120U2074	-	-	-
		T	P	6	120U1568	-	-	120U1628	-	-
HLP075		T	C	6	-	-	120U1763	-	120U1838	-
		T	P	6	120U1578	-	-	120U1638	-	-
HLP078		T	C	6	-	120U245 5	120U2451	-	-	-
HLP081		T	C	6	-	120U191 3	120U1778	-	120U1848	-
		T	C	8	-	-	120U1783	-	-	-
		T	P	6	120U1588	-	-	120U1648	-	-
HCP094		T	C	6	-	-	120U0598	-	-	-
		T	C	7	-	-	120U0603	-	-	-
		T	C	8	-	-	120U0608	-	-	-
HCP109		T	C	6	-	-	120U0373	-	-	-
		T	C	7	-	-	-	-	-	-
		T	C	8	-	-	120U0383	-	-	-
HCP120		T	C	6	-	-	120U0398	-	-	-
		T	C	7	-	-	-	-	-	-
HRM032		T	C	8	-	-	120U0408	-	-	-
		U	P	6	120U0921	120U202 9	120U0996	-	-	-
HRM034		T	P	6	-	-	-	120U0956	-	-
		U	P	6	120U0926	120U108 1	120U1001	-	120U2232	-
HRM038		T	P	6	-	-	120U2367	120U2122	-	120U2087
		U	P	6	120U0931	120U109 1	120U1011	120U0966	120U1056	-
HRM040		T	P	6	-	-	120U2372	120U2137	-	120U2092
		U	P	6	120U0936	120U110 1	120U1021	120U2147	120U1061	-
HRM042		T	P	6	-	-	120U2377	120U2142	-	120U2462
		U	P	6	120U0941	120U111 1	120U1031	120U0971	120U1066	-
HRM045		T	P	6	-	-	120U2127	120U2152	-	120U2107
		U	P	6	120U0946	120U112 1	120U1041	120U0981	120U1071	-

HRM047	U	P	6	120U0951	120U113 1	120U1051	120U0991	120U1076	-
	T	P	6	-	-	120U2132	120U2162	-	120U2097
HRM048	U	C	8	-	-	120U1671	-	-	-
	U	P	6	120U1496	-	120U1666	-	120U1791	-
HRM051	T	P	6	-	-	120U1676	120U2187	-	120U2382
	U	P	6	120U1506	120U186 6	120U1686	120U2252	120U1801	-
HRM054	U	C	6	120U1516	-	-	-	-	-
	U	P	6	120U1511	120U187 1	120U1696	120U2257	120U1811	-
	T	P	6	-	-	-	-	-	120U2292
HRM058	T	P	6	120U1521	-	-	-	-	120U2112
	U	C	6	120U1536	-	-	-	-	-
	U	P	6	120U1531	120U187 6	120U1711	-	120U1821	-
HRM060	T	P	6	120U1541	-	120U1721	-	-	120U2082
	T	C	6	120U2242	-	-	-	-	-
	U	C	6	120U1551	120U207 7	-	-	-	-
	U	C	8	-	-	120U1741	-	-	-
	U	P	6	120U1546	120U188 1	120U1736	120U1611	120U1831	-
HLM068	T	C	6	-	120U189 1	120U1746	-	120U2598	120U2392
	T	P	6	120U1556	-	-	120U1616	-	-
HLM072	T	C	6	-	120U189 6	120U1751	-	120U2602	120U1856
	T	C	8	-	120U220 2	120U2067	-	-	-
	T	P	6	120U1566	-	-	120U1626	-	-
HLM075	T	C	6	-	120U190 1	120U1761	-	120U1836	-
	T	P	6	120U1576	-	-	120U1636	-	-
HLM078	T	C	6	-	120U190 6	120U1771	-	-	-
HLM081	T	C	6	-	120U191 1	120U1776	-	120U1846	120U2102
	T	P	6	120U1586	-	-	120U1646	-	-
HCM094	T	C	6	-	120U089 1	120U0581	-	120U0711	120U0746
	T	C	7	-	-	120U0586	-	-	-
	T	C	8	-	-	120U0596	-	-	-
HCM109	T	C	6	-	120U250 6	120U0366	-	-	-
	T	C	7	-	-	-	-	-	-
	T	C	8	-	-	120U1924	-	-	-
HCM120	T	C	6	-	120U076 1	120U0391	-	-	-
	T	C	7	-	-	120U0396	-	-	-
	T	C	8	-	-	120U2207	-	-	-
HRM032	U	P	6	120U0918	120U202 6	120U0993	-	-	-
	T	P	6	-	-	-	120U0953	-	-
HRM034	T	P	6	-	-	120U2364	120U2119	-	120U2084
	U	P	6	120U0923	120U107 8	120U0998	-	120U2229	-
HRM038	T	P	6	-	-	120U2369	120U2134	-	120U2089
	U	P	6	120U0928	120U108 8	120U1008	120U0963	120U1053	-
HRM040	T	P	6	-	-	120U2374	120U2139	-	120U2459

		U	P	6	120U0933	120U1098	120U1018	120U2144	120U1058	
HRM042		T	P	6	-	-	120U2124	120U2149	-	120U2104
		U	P	6	120U0938	120U1108	120U1028	120U0968	120U1063	-
HRM045		U	P	6	120U0943	120U1118	120U1038	120U0978	120U1068	-
HRM047		T	P	6	-	-	120U2129	120U2159	-	120U2094
		U	P	6	120U0948	120U1128	120U1048	120U0988	120U1073	
HRM048		U	C	8	-	-	120U1668	-	-	-
		U	P	6	120U1493	-	120U1663	-	120U1788	-
HRM051		T	P	6	-	-	120U1673	120U2184	-	120U2379
		U	P	6	120U1503	120U1863	120U1683	120U2249	120U1798	-
		T	P	6	-	-	-	-	-	120U2289
		U	C	6	120U1513	-	-	-	-	-
HRM054		U	P	6	120U1508	120U1868	120U1693	120U2254	120U1808	-
		T	C	6	120U1523	-	-	-	-	-
		T	P	6	120U1518	-	-	-	-	120U2109
		U	C	6	120U1533	-	-	-	-	-
HRM058		U	C	8	-	-	120U1716	-	-	-
		U	P	6	120U1528	120U1873	120U1708	120U1598	120U1818	-
		T	C	6	120U2239	-	-	-	-	-
		T	P	6	120U1538	-	120U1718	-	-	120U2079
		U	C	6	120U1548	120U2074	-	-	-	-
HRM060		U	C	8	-	-	120U1738	-	-	-
		U	P	6	120U1543	120U1878	120U1733	120U1608	120U1828	-
HLM068		T	C	6	-	120U1888	120U1743	-	120U2595	120U2389
		T	P	6	120U1553	-	-	120U1613	-	-
		T	C	6	-	120U1893	120U1748	-	120U2599	120U1853
		T	C	8	-	120U2199	120U2064	-	-	-
HLM072		T	P	6	120U1563	-	-	120U1623	-	-
HLM075		T	C	6	-	120U1898	120U1758	-	120U1833	-
		T	P	6	120U1573	-	-	120U1633	-	-
HLM078		T	C	6	-	120U1903	120U1768	-	-	-
		T	C	6	-	120U1908	120U1773	-	120U1843	120U2099
		T	C	8	-	-	120U2006	-	-	-
HLM081		T	P	6	120U1583	-	-	120U1643	-	-
		T	C	6	-	120U0888	120U0578	-	-	120U0743
		T	C	7	-	-	120U0583	-	-	-
HCM094		T	C	8	-	-	-	-	-	-
		T	C	6	-	-	120U0363	-	-	-
		T	C	7	-	-	-	-	-	-
HCM109		T	C	8	-	-	-	-	-	-
		T	C	6	-	120U0758	120U0388	-	-	-
		T	C	7	-	-	-	-	-	-
HCM120		T	C	8	-	-	-	-	-	-