area Cooling Solutions

iCOOL G3i Condensing units

Technical Brochure

areacooling.com

Area Cooling Solutions Sp. z o.o.
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Table of contents

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1. *General information*

- Refrigeration iCOOL condensing units are designed for automatic operation in refrigerated storage rooms, refrigeration cabinets, liquid coolers and other equipment the operating parameters of which meet the requirements of unit's characteristics.

- Condensing units are designed to be used with HFC refrigerants. Refrigerants allowed for specific units are listed in table below. Filling or refilling these units with any other refrigerant type can cause damage. The units must not operate in conditions exceeding their working parameters. Doing otherwise can cause damage to the unit and will void the warranty.

Table of permitted refrigerants:

	iCOOL 4.5 MHP G3i	iCOOL 7 MHP G3i	iCOOL 10 MHP G3i	iCOOL 3 MP G3i	iCOOL 6 MP G3i
R404A	✓	✓	✓	✓	✓
R448A	✓	✓	✓	✓	✓
R449A	✓	✓	✓	✓	✓
R134a	✓	✓	✓		
R513A	✓	✓	✓		

2. *Type code description*

iCOOL	17D	MHP
•*condensing unit in housing equipped with an inverter compressor*	• *17-aproximated cooling capacity, kW* • *D Dual compressor*	• MP medium temperature • MHP high temperature

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3. *Unit specification*

3.1. *Components*

- Panasonic or Avic hermetic inverter compressor or tandem of Panasonic compressors (inverter + fixed speed) with crankcase heater
- Air-cooled condenser
- EC fans with regulation of rotation speed
- Suction accumulator on suction line
- Shut-off valve on suction line
- Insulation on suction pipeline
- Oil separator and check valve for each compressor
- Liquid receiver with shut-off valve on the outlet
- Safety valve
- Liquid line: filter drier, sight glass with moisture indicator, shut-off valve
- Service valves
- HP/LP pressure switch with auto reset – compressor protection
- Inverter – control of compressor's performance
- Controller – controlling rotation speed of fan
- Soundproof housing
- Suction and discharge pressure transducer
- Ambient and compressor oil sump temperature sensors
- Fully equiped electrical board
- Condenser protective grid
- Optional monitoring, heat reclaim

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4. *Technical data*

Condensing unit model					iCOOL 3 MP (G3i)	iCOOL 6 MP (G3i)	iCOOL 4.5 MHP (G3i)	iCOOL 7 MHP (G3i)	iCOOL 10 MHP (G3i)
Dimensions	Length		A	[mm]	1105	1289	1106	1140	1280
	Height		B	[mm]	559	758	559	758	963
	Width		C	[mm]	466	439	461	439	439
Gross weight				[kg]	125	150	118	135	176
Condenser	Fans x diameter			[mm]	1x450	1x630	1x450	1x630	1x630
	Air flow			[m^3/h]	3850	6150	3850	6150	6150
	Fan power supply			[V/ph/Hz]	200-277/1/50	200-277/1/50	200-277/1/50	200-277/1/50	200-277/1/50
	Fan power consumption			[W]	170	190	170	190	190
	Fan amperage			[A]	1,4	1,5	1,4	1,5	1,5
Compressor	Model				C-7RZ320L4ABL	C-9RZ580L4AAL	C-7RVN113L0A	C-7RZ320L4ABL	C-SBS180H00B
	Volumetric flow			[m^3/h]	1,7-10,4	5,2-18,7	1,25-7,5	1,7-10,4	5,8-17,4
	Frequency			[Hz]	Inv. /30-180	Inv. /25-90	Inv. /30-180	Inv. /30-180	Inv. /30-90
	Current	MCC		[A]	7	23	7	7	20
		LRA		[A]	27	75	27	27	53
	Oil type				FV68S	FV68S	FV68S	FV68S	FV68S
	Compressor oil fill			[dm^3]	0,7	2,1	0,7	0,7	2,0
	Crankcase heater			[W]	35	35	35	40	70
Sound level @10 m				[dBa]	39,0	TBC	39,0	40,0	39,3
Ports	Suction line			[mm]	22,23	22,23	15,88	19,05	22,23
	Liquid line			[mm]	9,53	9,53	9,53	9,53	12,70
Liquid receiver				[dm^3]	3,9	7,1	3,9	7,1	10,0
Power supply	Voltage			[V/ph/Hz]	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
	Recommended minimum power cable cross-section			[mm^2]	5x2,5	5x4,0	5x1,5	5x2,5	5x4,0
	Recommended minimum circuit breaker				C16/B25	B20	B16	C16/B25	C25/B32

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5. Capacity tables

R404A		Capacity (subcooling: 3 K, superheat: 10 K)												
Model	Range	T_e, °C	-15		-10		-5		0		5		10	
		T_a, °C	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W
iCOOL 4.5 MHP G3i	min	27	685	377	824	396	981	418	1 155	442	1 346	471	-	-
		32	672	398	812	421	969	446	1 141	475	1 329	508	-	-
		38	661	426	799	452	952	482	1 119	515	1 298	554	-	-
		43	648	451	782	480	929	513	1 088	550	1 257	593	-	-
	max	27	4 107	2 259	4 944	2 377	5 886	2 506	6 931	2 653	8 075	2 824	-	-
		32	4 034	2 389	4 873	2 525	5 812	2 675	6 848	2 847	7 973	3 048	-	-
		38	3 965	2 557	4 791	2 714	5 709	2 890	6 712	3 091	7 789	3 324	-	-
		43	3 888	2 705	4 689	2 879	5 572	3 075	6 528	3 298	7 540	3 555	-	-
iCOOL 7 MHP G3i	min	27	1 042	524	1 225	549	1 429	574	1 654	599	1 901	624	-	-
		32	973	612	1 160	634	1 367	656	1 595	679	1 845	701	-	-
		38	947	649	1 134	670	1 343	691	1 573	713	1 824	734	-	-
		43	929	677	1 117	697	1 326	718	1 556	739	1 808	760	-	-
	max	27	6 071	3 106	7 472	3 396	8 160	3 682	9 279	4 006	10 461	4 327	-	-
		32	5 898	3 391	7 215	3 662	7 901	3 935	8 964	4 248	10 077	4 565	-	-
		38	5 748	3 659	6 957	3 926	7 625	4 202	8 605	4 521	9 621	4 852	-	-
		43	5 613	3 855	6 667	4 134	7 371	4 425	8 268	4 766	9 194	5 122	-	-
iCOOL 10 MHP G3i	min	27	2 527	2 833	3 216	2 701	4 080	2 604	5 146	2 505	6 439	2 495	7 978	2 495
		32	2 347	2 971	2 964	2 871	3 739	2 793	4 702	2 701	5 880	2 680	7 294	2 680
		38	2 142	3 151	2 681	3 094	3 357	3 045	4 204	2 970	5 250	2 938	6 519	2 938
		43	-	-	2 461	3 296	3 062	3 276	3 819	3 221	4 759	3 184	5 912	3 184
	max	27	9 471	5 393	11 226	5 547	13 275	5 682	15 659	5 810	18 404	5 943	21 528	6 094
		32	8 608	5 879	10 226	6 038	12 122	6 184	14 340	6 328	16 910	6 480	19 851	6 657
		38	7 627	6 548	9 091	6 716	10 812	6 875	12 835	7 036	15 195	7 212	17 911	7 416
		43	6 854	7 182	8 198	7 357	9 777	7 526	11 640	7 702	13 823	7 896	16 346	8 123

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R404A		Capacity (subcooling: 3 K, superheat: 10 K)												
Model	Range	T_e, °C	-40		-35		-30		-25		-20		**-15**	
		T_a, °C	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W
iCOOL 3 MP G3i	min	27	450	389	532	415	635	442	760	469	906	497	1 075	526
		32	366	488	452	512	559	536	688	560	838	584	1 010	609
		38	314	559	401	581	511	603	642	625	795	648	969	671
		43	296	593	384	615	493	637	624	659	777	681	951	703
	max	27	2 457	2 195	2 996	2 455	3 644	2 730	4 390	3 019	5 223	3 319	6 127	3 630
		32	2 353	2 549	2 916	2 773	3 574	3 016	4 317	3 276	5 130	3 554	5 997	3 853
		38	2 282	2 823	2 859	3 029	3 513	3 258	4 232	3 510	5 001	3 790	5 802	4 101
		43	2 206	2 975	2 783	3 183	3 419	3 419	4 103	3 685	4 819	3 985	-	-
iCOOL 6 MP G3i	min	27	1 067	1 314	1 268	1 355	1 518	1 397	1 872	1 436	2 253	1 469	2 667	1 493
		32	920	1 418	1 155	1 460	1 457	1 505	1 797	1 547	2 180	1 586	2 611	1 617
		38	830	1 540	1 048	1 583	1 317	1 630	1 640	1 678	2 021	1 722	2 466	1 762
		43	740	1 643	923	1 687	1 167	1 736	1 476	1 787	1 852	1 837	2 302	1 882
	max	27	3 630	4 837	4 615	5 069	5 700	5 319	6 924	5 583	8 329	5 854	9 963	6 131
		32	3 402	5 224	4 207	5 449	5 170	5 702	6 318	5 975	7 683	6 264	9 304	6 568
		38	2 949	5 692	3 589	5 912	4 433	6 170	5 500	6 458	6 816	6 771	8 407	7 108
		43	2 501	6 106	3 027	6 323	3 784	6 586	4 786	6 888	6 051	7 222	-	-

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R448A		Capacity (subcooling: 3 K, superheat: 10 K)											
Model	Range	T_e, °C	-15		-10		-5		0		5		10	
		T_a, °C	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W
iCOOL 4.5 MHP G3i	min	27	658	362	791	380	942	401	1 109	424	1 292	452	-	-
		32	645	382	780	404	930	428	1 095	456	1 276	488	-	-
		38	635	409	767	434	914	463	1 074	494	1 246	532	-	-
		43	622	433	751	461	892	492	1 044	528	1 207	569	-	-
	max	27	4 212	2 251	4 927	2 349	5 766	2 456	6 746	2 576	7 878	2 712	-	-
		32	4 089	2 355	4 802	2 472	5 617	2 596	6 559	2 734	7 635	2 888	-	-
		38	3 955	2 489	4 651	2 627	5 425	2 773	6 297	2 930	7 277	3 101	-	-
		43	3 764	2 667	4 620	2 818	5 385	2 984	6 253	3 167	7 220	3 368	-	-
iCOOL 7 MHP G3i	min	27	1 011	508	1 188	533	1 386	557	1 604	581	1 844	605	-	-
		32	944	594	1 125	615	1 326	636	1 547	659	1 790	680	-	-
		38	919	630	1 100	650	1 303	670	1 526	692	1 769	712	-	-
		43	901	657	1 083	676	1 286	696	1 509	717	1 754	737	-	-
	max	27	6 226	3 095	7 447	3 357	7 993	3 609	9 031	3 890	10 205	4 156	-	-
		32	5 979	3 343	7 109	3 585	7 636	3 819	8 586	4 080	9 650	4 325	-	-
		38	5 734	3 562	6 754	3 800	7 245	4 032	8 073	4 286	8 989	4 526	-	-
		43	5 433	3 801	6 569	4 047	7 124	4 294	7 920	4 577	8 804	4 852	-	-
iCOOL 10 MHP G3i	min	27	2 401	2 691	3 056	2 566	3 876	2 474	4 889	2 380	6 117	2 370	7 580	2 370
		32	2 230	2 823	2 816	2 727	3 552	2 654	4 467	2 566	5 586	2 546	6 930	2 546
		38	2 035	2 994	2 547	2 939	3 189	2 893	3 994	2 821	4 988	2 791	6 193	2 791
		43	-	-	2 338	3 131	2 909	3 112	3 628	3 060	4 522	3 025	5 616	3 025
	max	27	9 282	5 285	11 001	5 436	13 010	5 568	15 346	5 694	18 036	5 824	21 097	5 972
		32	8 436	5 761	10 021	5 917	11 880	6 060	14 053	6 201	16 572	6 350	19 454	6 524
		38	7 474	6 417	8 909	6 582	10 596	6 738	12 578	6 895	14 891	7 068	17 553	7 268
		43	6 717	7 038	8 034	7 210	9 581	7 375	11 407	7 548	13 547	7 738	16 019	7 961

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R448A		Capacity (subcooling: 3 K, superheat: 10 K)											
Model	Range	T_e, °C	-40		-35		-30		-25		-20		-15	
		T_a, °C	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W
iCOOL 3 MP G3i	min	27	-	-	507	395	605	421	724	447	863	474	1 023	501
		32	-	-	430	487	532	510	655	533	798	557	962	580
		38	-	-	382	553	486	574	611	596	757	617	923	639
		43	-	-	365	585	470	606	595	627	740	648	906	670
	max	27	-	-	2 853	2 338	3 470	2 600	4 181	2 875	4 975	3 161	5 835	3 457
		32	-	-	2 777	2 641	3 404	2 872	4 111	3 120	4 886	3 385	5 712	3 670
		38	-	-	2 723	2 885	3 346	3 102	4 030	3 343	4 763	3 609	5 526	3 905
		43	-	-	2 650	3 032	3 257	3 256	3 908	3 509	4 589	3 795	-	-
iCOOL 6 MP G3i	min	27	-	-	1 381	1 213	1 673	1 261	2 038	1 306	2 477	1 350	2 986	1 391
		32	-	-	1 230	1 314	1 520	1 367	1 880	1 418	2 311	1 467	2 810	1 515
		38	-	-	1 113	1 431	1 397	1 490	1 749	1 546	2 167	1 602	2 648	1 657
		43	-	-	1 037	1 530	1 304	1 592	1 635	1 653	2 027	1 714	2 479	1 775
	max	27	-	-	4 678	4 584	5 822	4 894	7 180	5 223	8 712	5 576	10 380	5 955
		32	-	-	4 466	4 958	5 501	5 278	6 732	5 619	8 125	5 984	9 647	6 378
		38	-	-	4 038	5 411	4 963	5 747	6 066	6 105	7 318	6 491	8 688	6 909
		43	-	-	3 634	5 817	4 474	6 167	5 478	6 543	6 620	6 949	-	-

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R449A		Capacity (subcooling: 3 K, superheat: 10 K)												
Model	Range	T_e, °C	-15		-10		-5		0		5		10	
		T_a, °C	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W
iCOOL 4.5 MHP G3i	min	27	651	358	783	376	932	397	1 097	420	1 279	447	-	-
		32	638	378	771	400	921	424	1 084	451	1 263	483	-	-
		38	628	405	759	429	904	458	1 063	489	1 233	526	-	-
		43	616	428	743	456	883	487	1 034	523	1 194	563	-	-
	max	27	4 065	2 234	4 693	2 299	5 698	2 454	6 829	2 638	8 080	2 864	-	-
		32	3 871	2 320	4 666	2 474	5 670	2 650	6 799	2 861	8 042	3 122	-	-
		38	3 790	2 510	4 652	2 687	5 645	2 891	6 754	3 136	7 968	3 434	-	-
		43	3 778	2 719	4 626	2 866	5 600	3 095	6 680	3 366	7 850	3 695	-	-
iCOOL 7 MHP G3i	min	27	1 016	527	1 229	556	1 458	586	1 699	617	1 948	651	-	-
		32	960	621	1 176	648	1 414	677	1 665	707	1 927	741	-	-
		38	931	695	1 150	721	1 395	749	1 658	780	1 934	815	-	-
		43	923	726	1 146	762	1 396	791	1 668	824	1 957	862	-	-
	max	27	6 454	3 223	7 323	3 451	8 579	3 787	9 835	4 143	11 061	4 524	-	-
		32	6 030	3 451	7 216	3 754	8 453	4 082	9 690	4 440	10 895	4 839	-	-
		38	6 004	3 770	7 143	4 069	8 344	4 407	9 549	4 789	10 719	5 226	-	-
		43	5 971	3 949	7 076	4 325	8 237	4 686	9 409	5 104	10 544	5 591	-	-
iCOOL 10 MHP G3i	min	27	2 408	2 625	3 008	2 573	3 750	2 526	4 663	2 486	5 772	2 454	7 094	2 432
		32	2 223	2 846	2 777	2 790	3 455	2 739	4 291	2 695	5 311	2 659	6 536	2 632
		38	2 004	3 137	2 513	3 077	3 125	3 022	3 876	2 973	4 797	2 932	5 912	2 901
		43	-	-	2 304	3 340	2 870	3 282	3 559	3 229	4 404	3 185	5 431	3 150
	max	27	8 811	5 168	10 656	5 366	12 850	5 564	15 429	5 778	18 416	6 028	21 823	6 337
		32	8 088	5 708	9 791	5 915	11 826	6 126	14 237	6 360	17 056	6 637	20 302	6 982
		38	7 268	6 428	8 827	6 648	10 691	6 878	12 916	7 139	15 545	7 451	18 606	7 843
		43	-	-	8 087	7 325	9 827	7 575	11 911	7 861	14 391	8 206	17 304	8 640

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R449A		Capacity (subcooling: 3 K, superheat: 10 K)												
Model	Range	T_e, °C	-40		-35		-30		-25		-20		-15	
		T_a, °C	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W
iCOOL 3 MP G3i	min	27	-	-	517	403	617	429	738	456	881	483	1 044	511
		32	-	-	439	497	543	520	668	544	814	568	981	592
		38	-	-	390	565	496	586	623	608	772	629	942	651
		43	-	-	373	597	479	618	606	640	755	661	924	683
	max	27	-	-	2 911	2 385	3 540	2 652	4 265	2 933	5 074	3 224	5 952	3 526
		32	-	-	2 833	2 694	3 472	2 930	4 194	3 182	4 984	3 452	5 826	3 743
		38	-	-	2 778	2 943	3 413	3 165	4 111	3 410	4 858	3 682	5 637	3 984
		43	-	-	2 703	3 092	3 322	3 321	3 986	3 579	4 681	3 871	-	-
iCOOL 6 MP G3i	min	27	-	-	1 409	1 264	1 707	1 310	2 080	1 353	2 527	1 394	3 047	1 431
		32	-	-	1 243	1 329	1 535	1 381	1 899	1 430	2 334	1 477	2 839	1 522
		38	-	-	1 105	1 427	1 384	1 484	1 730	1 539	2 142	1 594	2 619	1 647
		43	-	-	1 017	1 523	1 279	1 583	1 605	1 643	1 993	1 703	2 442	1 762
	max	27	-	-	4 770	4 603	5 821	4 888	7 103	5 196	8 585	5 532	10 231	5 901
		32	-	-	4 388	4 931	5 400	5 242	6 617	5 576	8 006	5 937	9 529	6 329
		38	-	-	3 988	5 388	4 911	5 720	6 009	6 074	7 249	6 454	8 597	6 863
		43	-	-	3 630	5 806	4 453	6 147	5 429	6 511	6 528	6 899	-	-

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R134a

Capacity (subcooling: 3 K, superheat: 10 K)

Model	Range	T_e, °C	-15		-10		-5		0		5		10	
		T_a, °C	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W
iCOOL 4.5 MHP G3i	min	27	-	-	500	321	595	343	695	366	806	388	932	409
		32	-	-	480	399	570	423	665	450	769	478	890	504
		38	-	-	456	450	539	480	627	515	726	551	840	587
		43	-	-	436	470	514	508	597	550	691	596	800	643
	max	27	-	-	3 563	1 287	4 213	1 344	4 890	1 416	5 632	1 491	6 478	1 554
		32	-	-	3 371	1 450	3 978	1 498	4 619	1 562	5 330	1 627	6 151	1 680
		38	-	-	3 116	1 589	3 680	1 639	4 282	1 703	4 963	1 768	5 758	1 822
		43	-	-	2 898	1 695	3 428	1 753	4 003	1 825	4 661	1 898	5 438	1 961
iCOOL 7 MHP G3i	min	27	-	-	861	407	1 031	410	1 210	417	1 407	426	1 634	434
		32	-	-	831	483	990	486	1 159	493	1 347	502	1 564	508
		38	-	-	782	543	929	547	1 087	556	1 264	564	1 471	570
		43	-	-	735	577	873	584	1 021	593	1 190	602	1 389	607
	max	27	-	-	4 329	1 643	5 145	1 709	5 998	1 799	6 935	1 896	8 002	1 979
		32	-	-	4 110	1 919	4 874	1 975	5 681	2 053	6 578	2 134	7 610	2 199
		38	-	-	3 812	2 144	4 519	2 200	5 277	2 276	6 132	2 352	7 129	2 409
		43	-	-	3 549	2 295	4 214	2 360	4 935	2 442	5 759	2 523	6 731	2 583
iCOOL 10 MHP G3i	min	27	1 758	2 662	2 216	2 649	2 793	2 628	3 524	2 600	4 440	2 566	5 574	2 526
		32	1 636	2 810	2 066	2 791	2 607	2 767	3 296	2 738	4 163	2 706	5 240	2 672
		38	-	-	1 895	2 978	2 397	2 950	3 037	2 921	3 847	2 892	4 859	2 863
		43	-	-	-	-	2 231	3 116	2 834	3 087	3 598	3 061	4 558	3 037
	max	27	5 295	2 950	6 508	3 062	7 985	3 159	9 782	3 249	11 942	3 340	14 502	3 439
		32	5 006	3 219	6 157	3 336	7 551	3 442	9 246	3 543	11 290	3 649	13 721	3 767
		38	4 663	3 589	5 747	3 715	7 049	3 832	8 629	3 949	10 539	4 073	12 817	4 216
		43	4 381	3 937	5 415	4 072	6 646	4 201	8 137	4 331	9 938	4 473	12 094	4 637

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R513A		Capacity (subcooling: 3 K, superheat: 10 K)												
Model	Range	T_e, °C	-15		-10		-5		0		5		10	
		T_a, °C	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W	Q, W	Pe, W
iCOOL 4.5 MHP G3i	min	27	-	-	600	385	714	412	834	439	967	466	1 118	491
		32	-	-	576	479	684	508	798	540	923	574	1 068	605
		38	-	-	547	540	647	576	752	618	871	661	1 008	704
		43	-	-	523	564	617	610	716	660	829	715	960	772
	max	27	-	-	4 276	1 544	5 056	1 613	5 868	1 700	6 759	1 789	7 773	1 865
		32	-	-	4 045	1 739	4 774	1 798	5 543	1 874	6 397	1 952	7 381	2 016
		38	-	-	3 740	1 907	4 416	1 967	5 139	2 044	5 955	2 122	6 909	2 186
		43	-	-	3 478	2 033	4 114	2 104	4 804	2 190	5 593	2 277	6 526	2 353
iCOOL 7 MHP G3i	min	27	-	-	1 033	488	1 237	492	1 452	500	1 688	511	1 961	521
		32	-	-	997	580	1 188	583	1 391	592	1 616	602	1 877	610
		38	-	-	938	652	1 115	656	1 304	667	1 517	677	1 765	684
		43	-	-	882	692	1 048	701	1 225	712	1 428	722	1 667	728
	max	27	-	-	5 194	1 971	6 174	2 051	7 198	2 159	8 322	2 275	9 602	2 374
		32	-	-	4 932	2 303	5 848	2 370	6 817	2 464	7 893	2 561	9 132	2 639
		38	-	-	4 574	2 572	5 423	2 641	6 332	2 731	7 358	2 822	8 555	2 890
		43	-	-	4 259	2 754	5 057	2 832	5 922	2 931	6 911	3 027	8 077	3 100
iCOOL 10 MHP G3i	min	27	2 031	1 052	2 518	1 062	3 107	1 062	3 828	1 054	4 708	1 038	5 772	1 016
		32	1 864	1 132	2 314	1 139	2 858	1 137	3 526	1 129	4 348	1 113	5 348	1 093
		38	1 672	1 269	2 082	1 271	2 576	1 267	3 185	1 256	3 940	1 241	4 867	1 222
		43	1 519	1 417	1 900	1 416	2 356	1 408	2 919	1 396	3 621	1 380	4 490	1 361
	max	27	5 616	3 264	7 062	3 353	8 821	3 450	10 871	3 554	13 191	3 664	15 760	3 779
		32	5 236	3 523	6 560	3 624	8 195	3 731	10 124	3 846	12 327	3 966	14 784	4 091
		38	4 798	3 889	5 983	4 003	7 477	4 124	9 266	4 251	11 333	4 383	13 662	4 519
		43	4 447	4 241	5 524	4 367	6 907	4 498	8 584	4 635	10 543	4 777	12 769	4 923

$T_e - evaporating\ temperature, ℃$

$T_a - ambient\ temperature, ℃$

(*)

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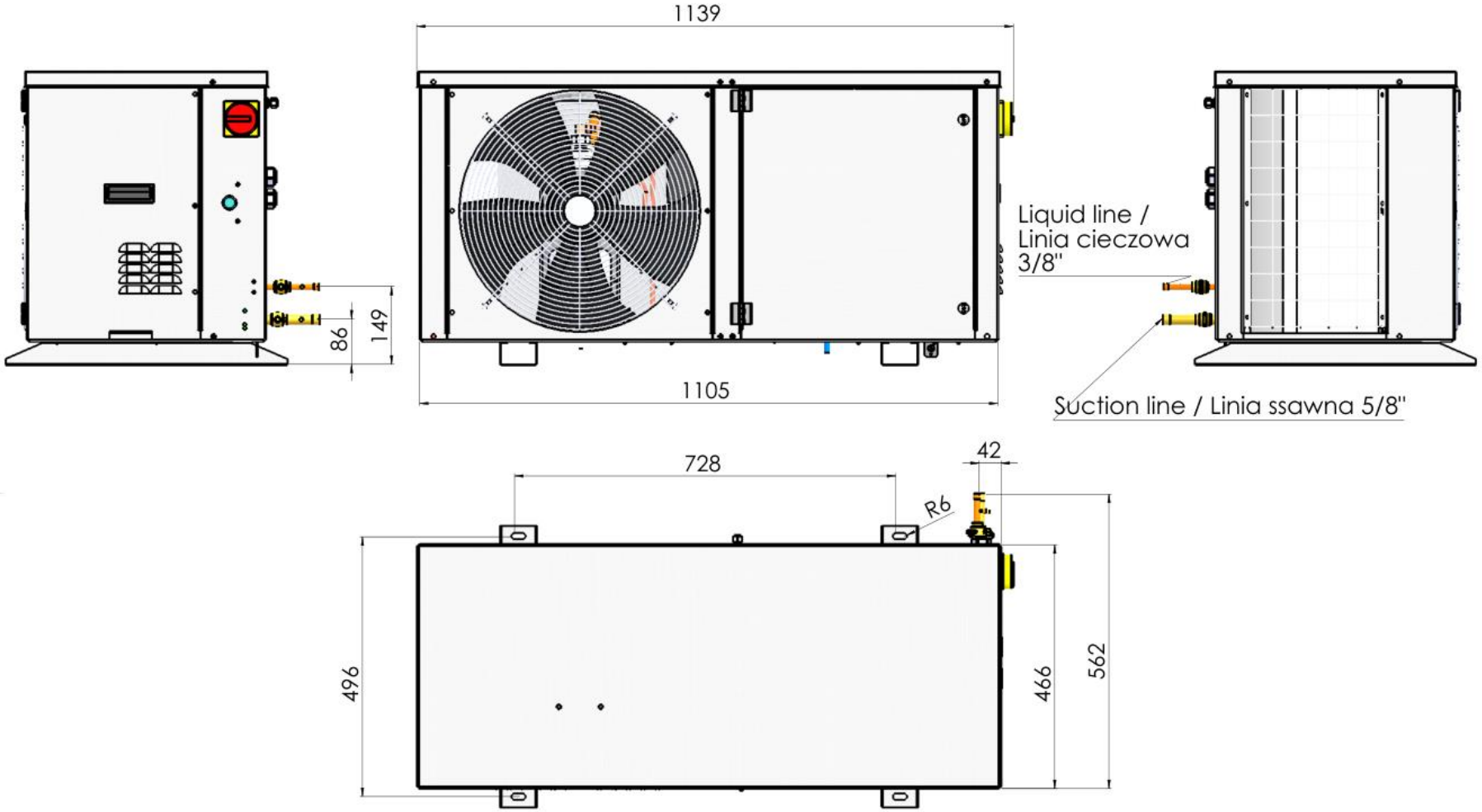
6. *Units drawings*

6.1. iCOOL 4.5 MHP G3i



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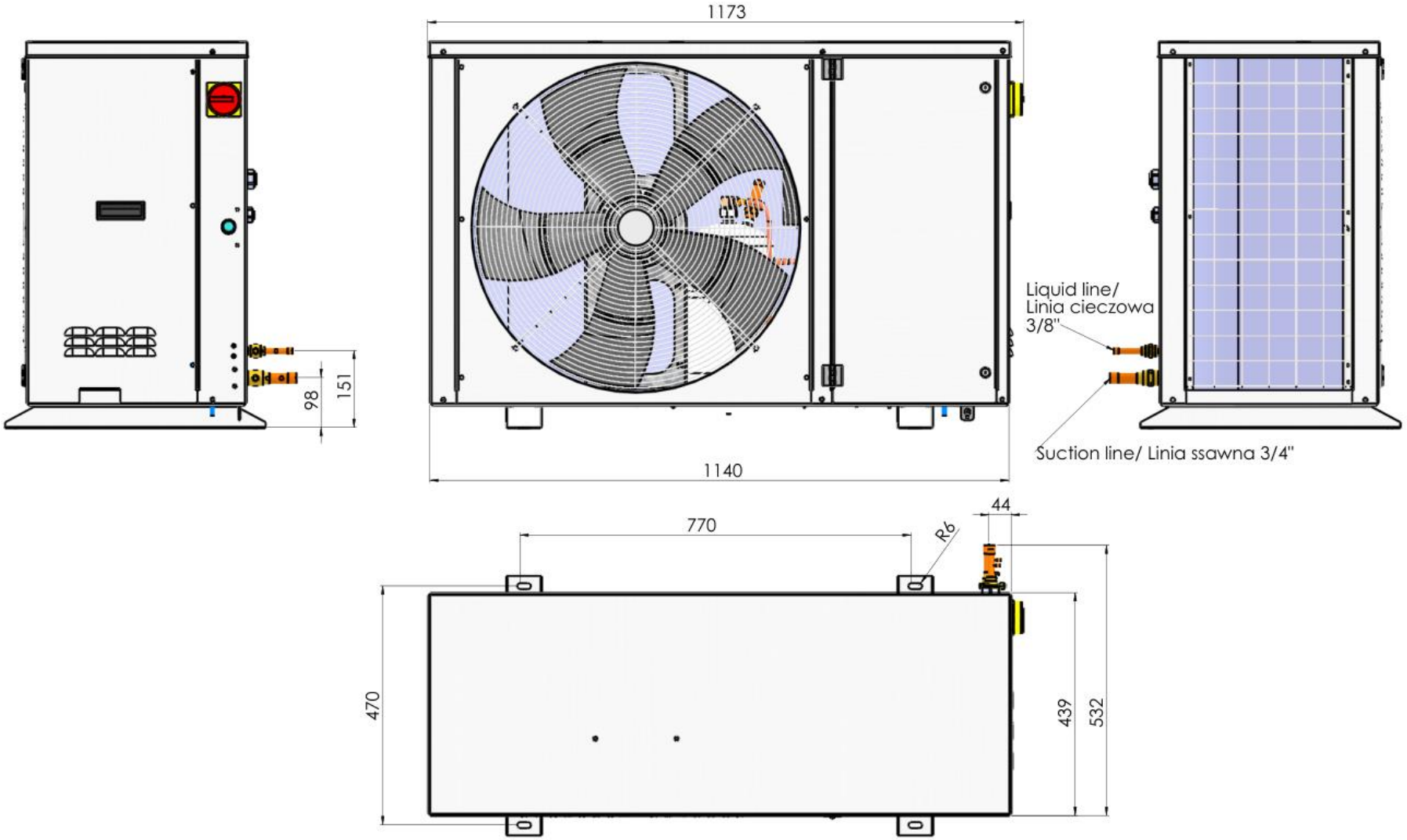
6.2. iCOOL 7 MHP G3i



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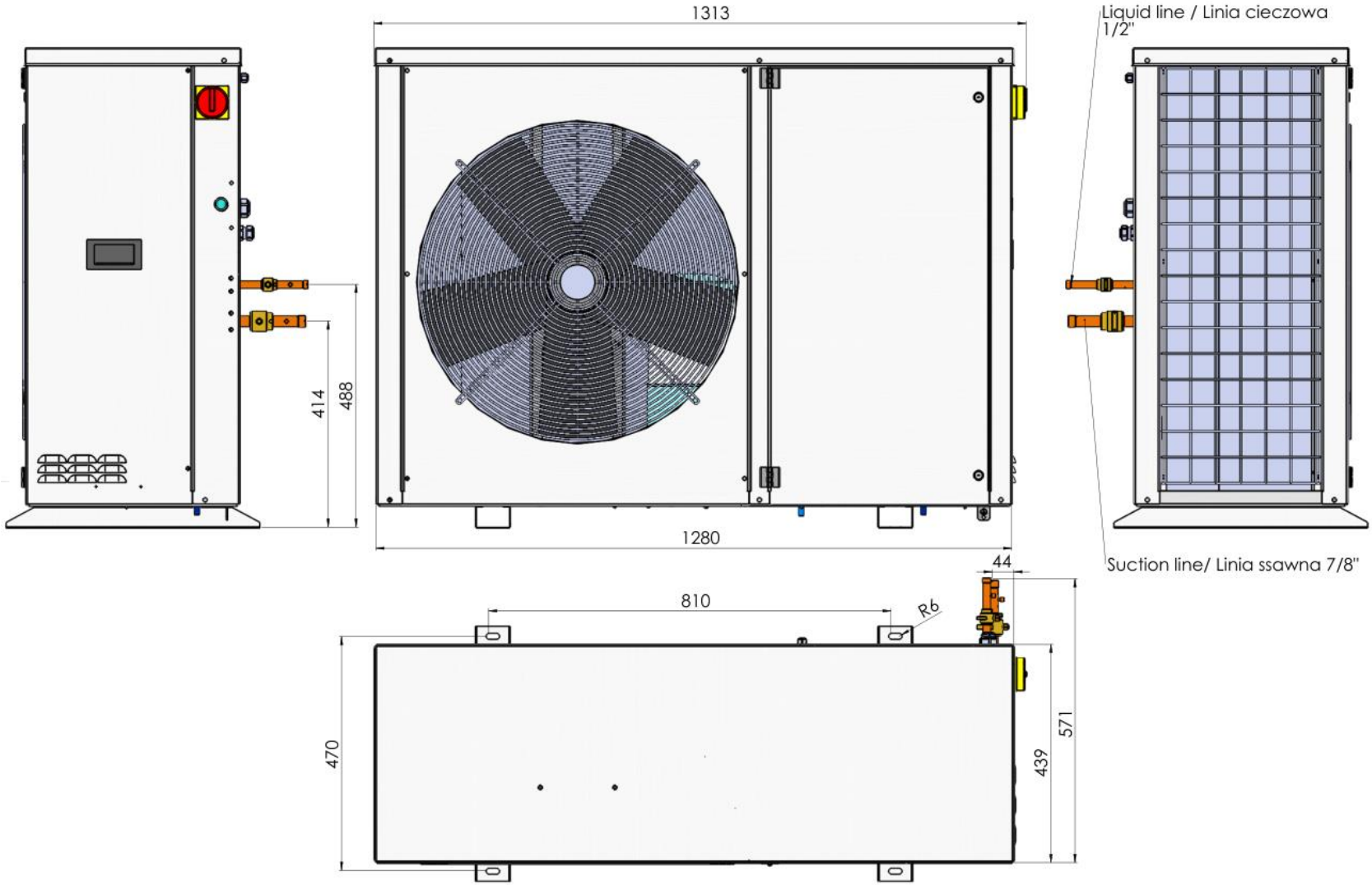
6.3. iCOOL 10 MHP G3i



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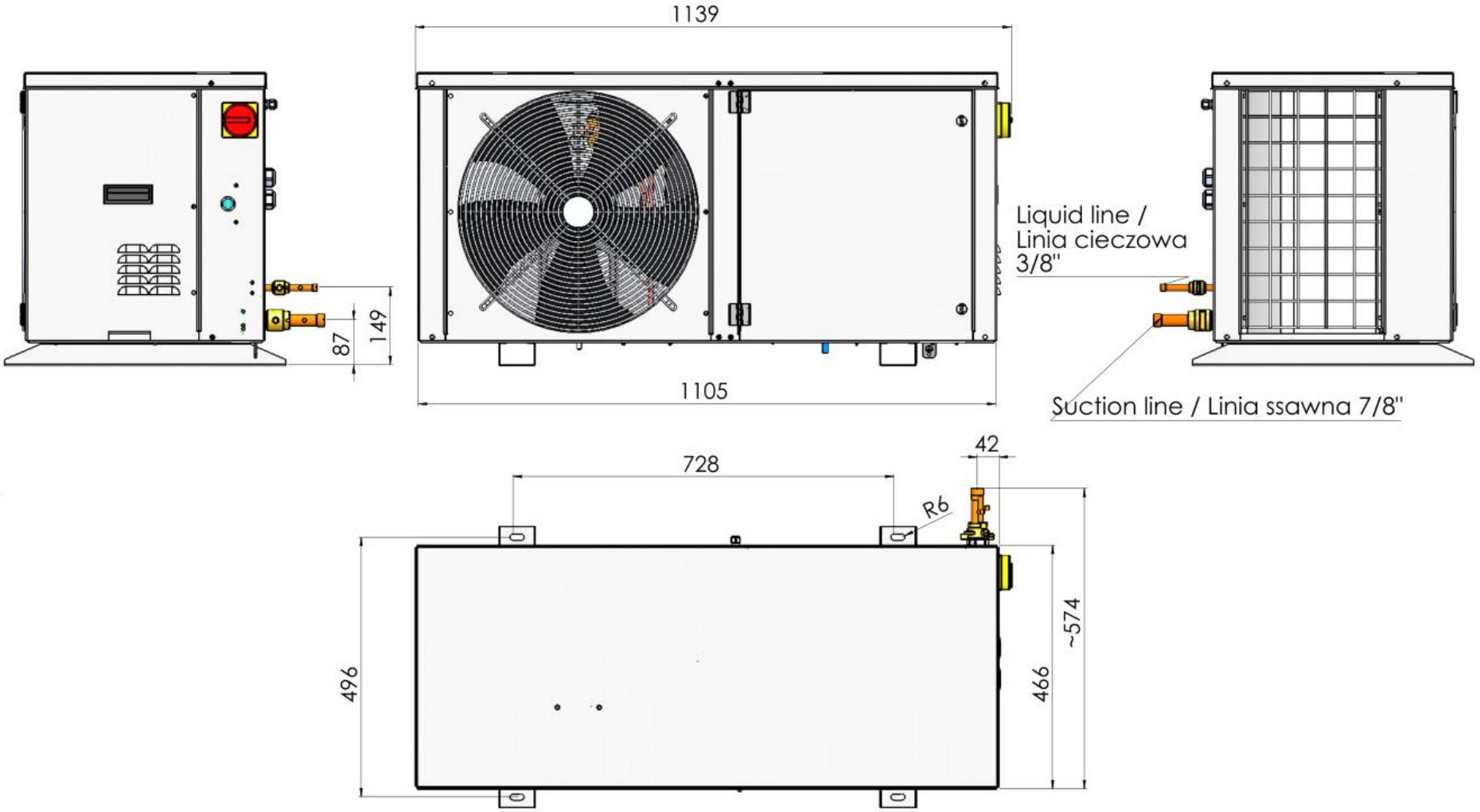
6.4. iCOOL 3 MP G3i



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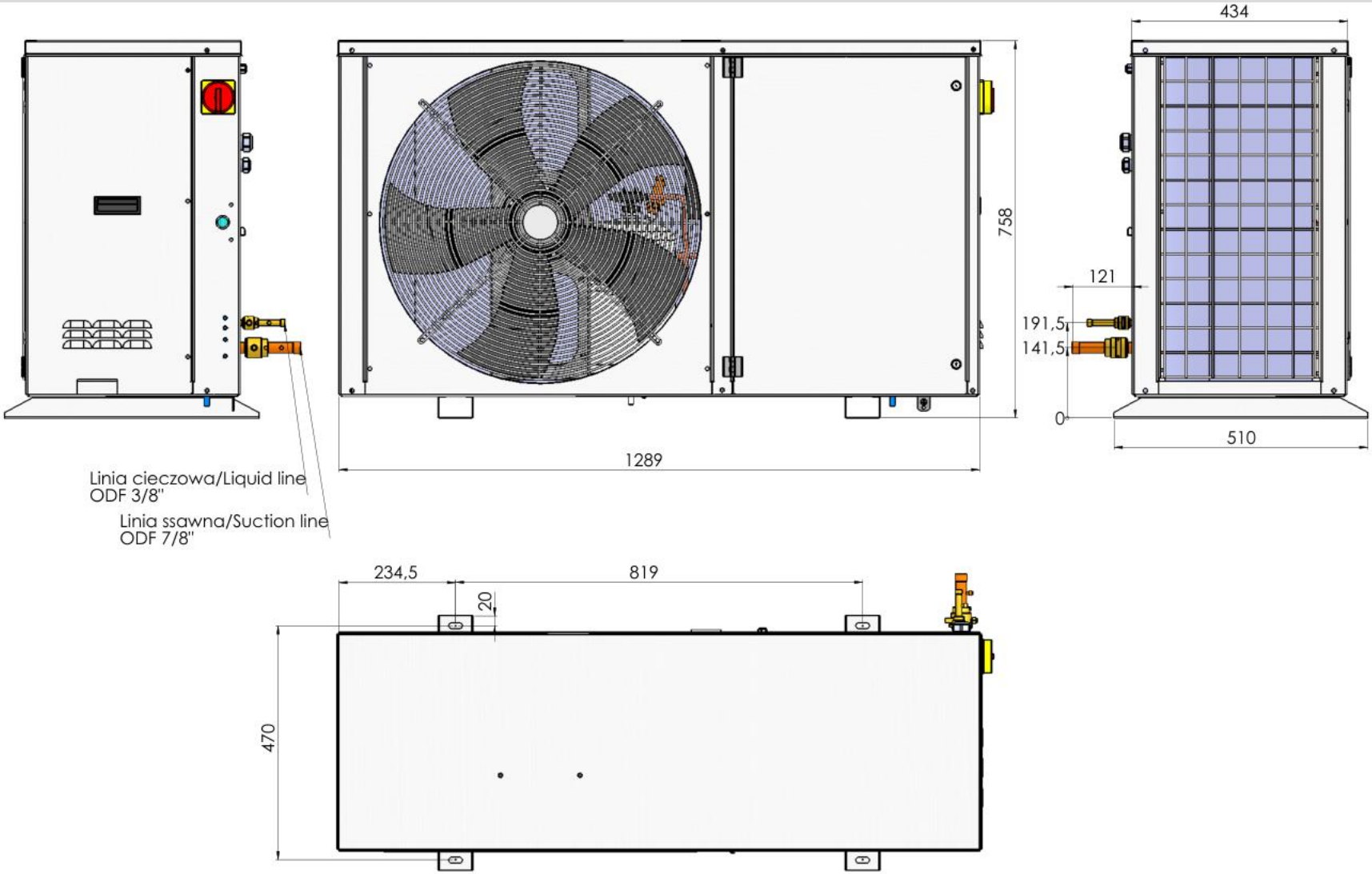
6.5. iCOOL 6 MP G3i



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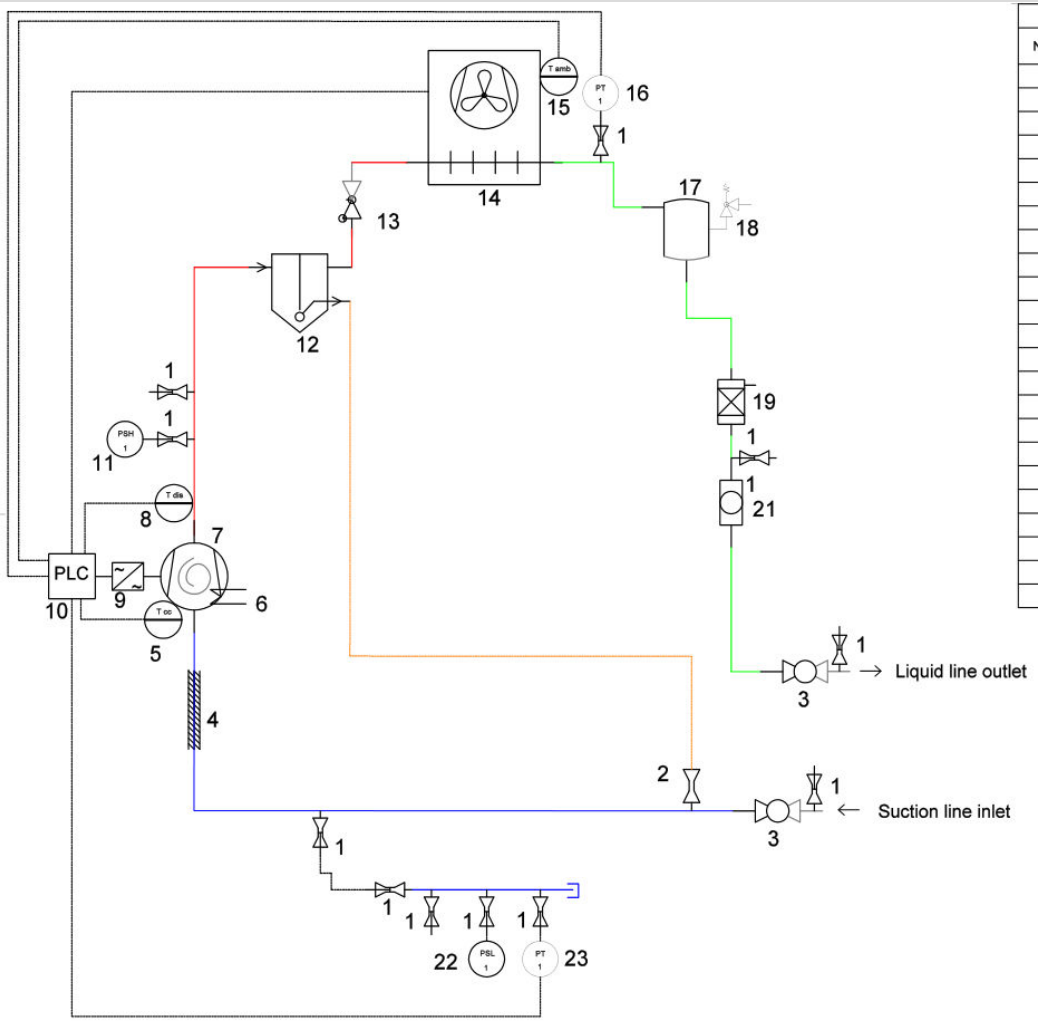
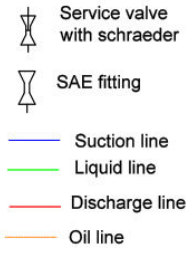
7. Schematic diagrams

7.1. iCOOL 4.5 MHP G3i



Components / Komponenty		
No. / Nr.	Name (EN)	Nazwa (PL)
1	Schraeder valve	Zawór serwisowy
2	SAE fitting	Złączka SAE
3	Ball valve	Zawór kulowy
4	Suction line insulation	Izolacja linii ssawnej
5	Crankcase temperature sensor	Czujnik temperatury karteru
6	Crankcase heater	Grzałka karteru
7	Compressor	Sprężarka
8	Discharge temperature sensor	Czujnik temperatury tłoczenia
9	Inverter	Falownik
10	PLC Controller	Sterownik PLC
11	HP Pressure Switch	Presostat HP
12	Oil separator	Odolejacz
13	Check valve	Zawór zwrotny
14	Condenser	Skraplacz
15	Ambient temperature sensor	Czujnik temperatury otoczenia
16	High pressure sensor	Przetwornik ciśnienia HP
17	Receiver	Zbiornik cieczy
18	Safety valve	Zawór bezpieczeństwa
19	Filter drier	Filtr odwadniacz
20	NC solenoid valve	Elektrozawór NC
21	Sight glass	Wziernik
22	LP Pressure Switch	Presostat LP
23	LP Pressure transducer	Przetwornik ciśnienia LP



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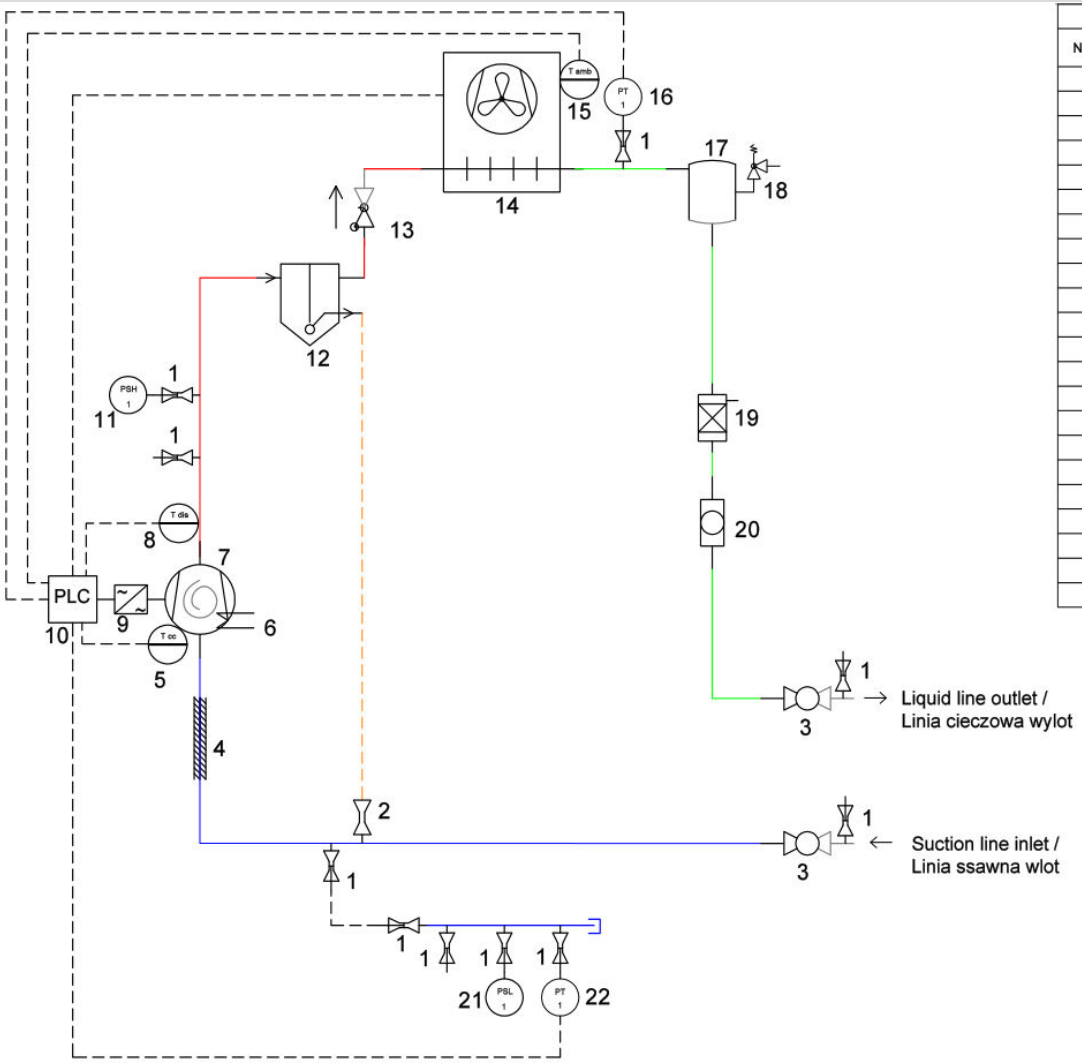
7.2. iCOOL 7 MHP G3i



Components / Komponenty		
No. / Nr.	Name (EN)	Nazwa (PL)
1	Schraeder valve	Zawór serwisowy
2	SAE fitting	Złączka SAE
3	Ball valve	Zawór kulowy
4	Suction line insulation	Izolacja linii ssawnej
5	Crankcase temperature sensor	Czujnik temperatury karteru
6	Crankcase heater	Grzałka karteru
7	Compressor	Sprężarka
8	Discharge temperature sensor	Czujnik temperatury tłoczenia
9	Inverter	Falownik
10	PLC Controller	Sterownik PLC
11	HP Pressure Switch	Presostat HP
12	Oil separator	Odolejacz
13	Check valve	Zawór zwrotny
14	Condenser	Skraplacz
15	Ambient temperature sensor	Czujnik temperatury otoczenia
16	HP Pressure sensor	Przetwornik ciśnienia HP
17	Receiver	Zbiornik cieczy
18	Safety valve	Zawór bezpieczeństwa
19	Filter drier	Filtr odwadniacz
20	Sight glass	Wziernik
21	LP Pressure Switch	Presostat LP
22	LP Pressure transducer	Przetwornik ciśnienia LP

Service valve with schraeder / Złączka serwisowa z zaworkiem schreadera

SAE fitting / Złączka SAE

Impulse line / Linia sygnałowa

Suction line / Linia ssawna

Liquid line / Linia cieczowa

Discharge line / Linia tłoczna

Oil line / Linia olejowa

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7.3. iCOOL 10 MHP G3i

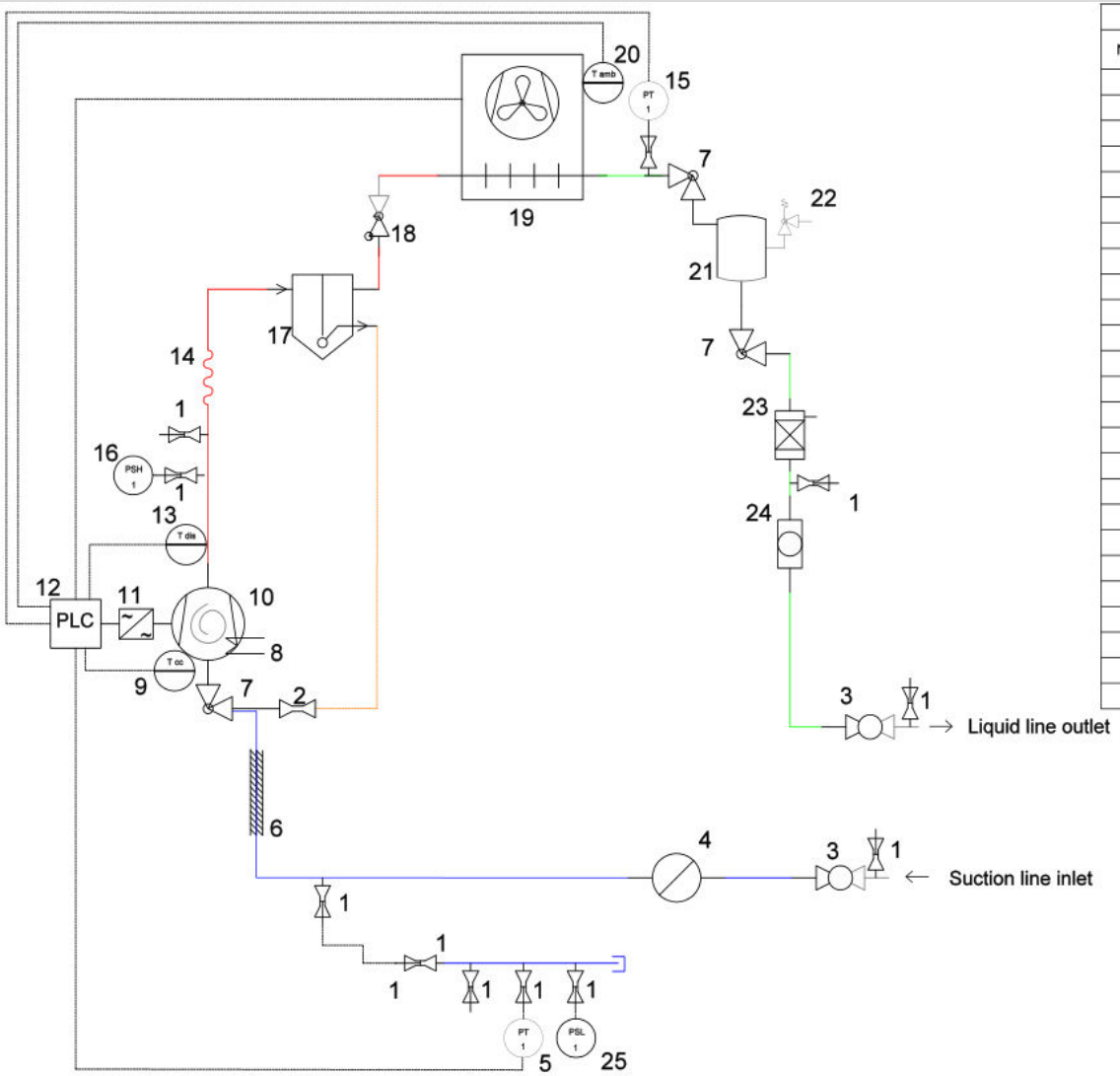

table		
No. / Nr.	Name (EN)	Nazwa (PL)
1	Schraeder valve	Zawór serwisowy
2	SAE fitting	Złączka SAE
3	Ball valve	Zawór kulowy
4	Suction line accumulator	Separator cieczy
5	LP Pressure transducer	Przetwornik ciśnienia LP
6	Suction line insulation	Izolacja linii ssawnej
7	Rotalock valve	Zawór rotalock
8	Crankcase heater	Grzałka karteru
9	Crankcase temperature sensor	Czujnik temperatury karteru
10	Compressor	Sprężarka
11	Inverter	Falownik
12	PLC Controller	Sterownik PLC
13	Discharge temperature sensor	Czujnik temperatury tłoczenia
14	Vibration absorber	Tłumik drgań
15	HP Pressure transducer	Przetwornik ciśnienia HP
16	HP Pressure Switch	Presostat HP
17	Oil separator	Odolejacz
18	Check valve	Zawór zwrotny
19	Condenser	Skraplacz
20	Ambient temperature sensor	Czujnik temperatury otoczenia
21	Receiver	Zbiornik
22	Safety valve	Zawór bezpieczeństwa
23	Filter drier	Filtr odwadniacz
24	Sight glass	Wziernik
25	LP Pressure switch	Presostat LP

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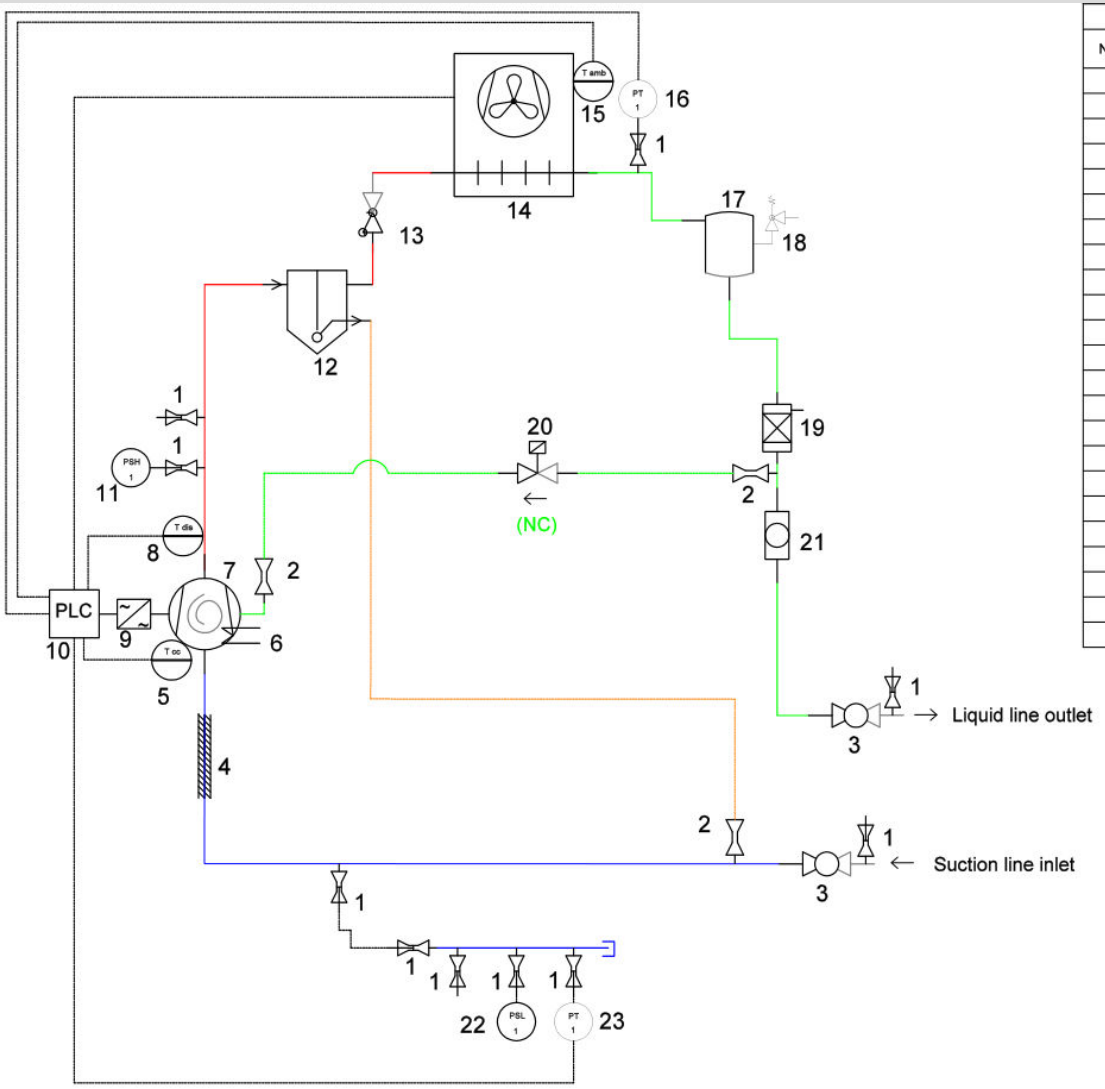
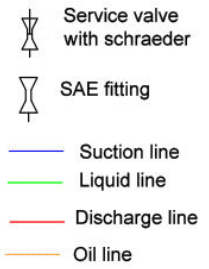
7.4. iCOOL 3 MP G3i



Components / Komponenty		
No. / Nr.	Name (EN)	Nazwa (PL)
1	Schraeder valve	Zawór serwisowy
2	SAE fitting	Złączka SAE
3	Ball valve	Zawór kulowy
4	Suction line insulation	Izolacja linii ssawnej
5	Crankcase temperature sensor	Czujnik temperatury karteru
6	Crankcase heater	Grzałka karteru
7	Compressor	Sprężarka
8	Discharge temperature sensor	Czujnik temperatury tłoczenia
9	Inverter	Falownik
10	PLC Controller	Sterownik PLC
11	HP Pressure Switch	Presostat HP
12	Oil separator	Odolejacz
13	Check valve	Zawór zwrotny
14	Condenser	Skraplacz
15	Ambient temperature sensor	Czujnik temperatury otoczenia
16	High pressure sensor	Przetwornik ciśnienia HP
17	Receiver	Zbiornik cieczy
18	Safety valve	Zawór bezpieczeństwa
19	Filter drier	Filtr odwadniacz
20	NC solenoid valve	Elektrozawór NC
21	Sight glass	Wziernik
22	LP Pressure Switch	Presostat LP
23	LP Pressure transducer	Przetwornik ciśnienia LP



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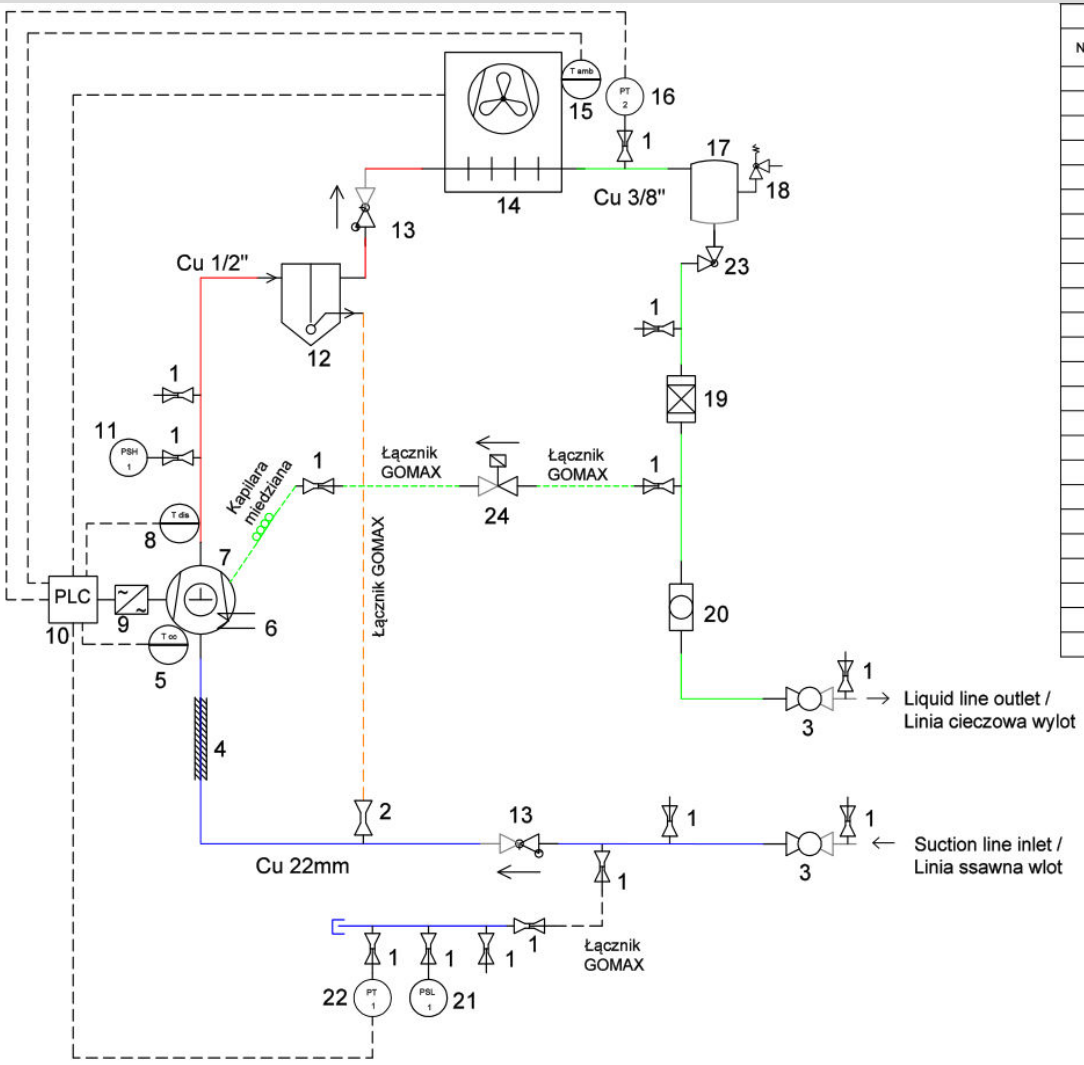
7.5. iCOOL 6 MP G3i



Components / Komponenty		
No. / Nr.	Name (EN)	Nazwa (PL)
1	Schraeder valve	Zawór serwisowy
2	SAE fitting	Złączka SAE
3	Ball valve	Zawór kulowy
4	Suction line insulation	Izolacja linii ssawnej
5	Crankcase temperature sensor	Czujnik temperatury karteru
6	Crankcase heater	Grzałka karteru
7	Compressor	Sprężarka
8	Discharge temperature sensor	Czujnik temperatury tłoczenia
9	Inverter	Falownik
10	PLC Controller	Sterownik PLC
11	HP Pressure Switch	Presostat HP
12	Oil separator	Odolejacz
13	Check valve	Zawór zwrotny
14	Condenser	Skraplacz
15	Ambient temperature sensor	Czujnik temperatury otoczenia
16	HP Pressure sensor	Przetwornik ciśnienia HP
17	Liquid receiver	Zbiornik cieczy
18	Safety valve	Zawór bezpieczeństwa
19	Filter drier	Filtr odwadniacz
20	Sight glass	Wziernik
21	LP Pressure Switch	Presostat LP
22	LP Pressure transducer	Przetwornik ciśnienia LP
23	Rotalock valve	Zawór kątowy
24	Solenoid valve	Zawór elektromagnetyczny

Service valve with schraeder / Złączka serwisowa z zaworkiem schreadera
SAE fitting / Złączka SAE
Impulse line / Linia sygnałowa
Suction line / Linia ssawna
Liquid line / Linia cieczowa
Discharge line / Linia tłoczna
Oil line / Linia olejowa

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