

Equipment for cogeneration units (CGU)

Equipment of Municipal Enterprise "Kharkiv Heat Networks"		Equipment for connecting through gas distribution networks			Equipment for connecting through power distribution networks	
No.	GGU capacity 50, kW	Gas meter size*	Metering unit*	Gas pressure regulating cabinet (GPRC)*	Equipment for connecting through power distribution networks	Equipment for connecting through power distribution networks (high-voltage transmission lines)
1	100	Delta Compact G25 DN50 (1:160) min 0,25 max 40	Gas metering cabinet	GPRC - 4/4 - 2L - 40x50 - 3/3 B/249-AP 1 1/2"x1 1/2" + OS/66-AP (Tartarini)		
2	120	Delta Compact G25 DN50 (1:160) min 0,25 max 40	Gas metering cabinet	GPRC - 4/4 - 2L - 40x50 - 3/3 B/249-AP 1 1/2"x1 1/2" + OS/66-AP (Tartarini)		
3	150	Delta Compact G-40 DN50 (1:200) min 0,3 max 65	Gas metering cabinet	GPRC - 4/4 - 2L - 40x50 - 3/3 B/249-AP 1 1/2"x1 1/2" + OS/66-AP (Tartarini)		
4	220	G-65 Delta SE G-65 DN50 (1:200) min 0,5 max 100	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP		
5	200	Delta Compact G-40 DN50 (1:200) min 0,3 max 65	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP		
6	1000	G-250 Delta2100 G-250 DN100 (1:160) min 2,5 max 400	Gas metering cabinet	GPRC - 7/10 - 2L - 65x100 - 3/3 MBN-QA DN50x100 PN16 + OS/66-AP	Power cables "10 3x240 mm ² " 1,65 km; power transformer - 6/0,4 kV 1 MBA	A total of 5 pcs. of 10 kV cells including: A relay protection and automation (RPA) panel with a microprocessor device and power direction - 1 pc. Vacuum switch 1 pc.; Surge arresters nonlinear - 3 pcs. Current transformer -3 pcs; Power cables "КВВГЕнр 4*2,5" -0,75km ; "КВВГЕнр 10*2,5"-0,75km; "ПВ-1 2,5" - 1,0km
7	1000	G-250 Delta2100 G-250 DN100 (1:160) min 2,5 max 400	Gas metering cabinet	GPRC - 7/10 - 2L - 65x100 - 3/3 MBN-QA DN50x100 PN16 + OS/66-AP	Power cables "10 3x240 mm ² " 1,65 km; transformer substation consisting of: power transformer-10/0,4 kV 630 KBA; high-voltage load switches - 3 pcs; panel equipment "ЩО-90" - 3 pcs.; power transformer TMГ-6/0,4 kV 1 MBA	
8	1000	G-250 Delta2100 G-250 DN100 (1:160) min 2,5 max 400	Gas metering cabinet	GPRC - 7/10 - 2L - 65x100 - 3/3 MBN-QA DN50x100 PN16 + OS/66-AP	Transformer substation consisting of: power transformer TMГ-6/0,4 kV 630 KBA; high-voltage load switches - 3 pcs; panel equipment "ЩО-90" - 3 pcs.; power cables "ААБл 10 3x240 mm ² " 1,65 km; "ААБл 10 3x120 mm ² " 2 km ; power	
9	6000	FLOWSIC600 G1600 DN250 (1:50) min 50 max2500	Gas metering cabinet	GPRC - 11/17 - 2L - 200x250 - 3/3 BFL DN100 PN16 + PS/79-2 + OS/80X-BPA	Power cable "АпвЕраПу-15 1*500/70 mm ² " 2,3 km.	

10	1500	S3F Delta G-400 DN150 (1:160) min 4 max 650	Gas metering cabinet	GPRC - 2L - 100x125 - 3/3 MBN- QA DN65x100 PN16 + OS/66-AP	Transformer substation consisting of: power transformer TMГ-6/0,4 кВ 630 КВА; high-voltage load switches - 3 pcs; panel equipment "ЦО-90" - 3 pcs.; power cables "ААБл 10 3x240 mm ² " 1,65 km; "ААБл 10 3x120 mm ² " 2 km ; power cables "TMГ-6/0,4 kV 1 MDA"	A total of 10 pcs. of 10 kV cells including: A relay protection and automation (RPA) panel with a microprocessor device and power direction - 1 pc. Vacuum switch 1 pc.; Surge arresters nonlinear - 3 pcs.; Current transformer -3 pcs; Power cables "КВВГЕНр 4*2,5" -1,5km ; "КВВГЕНр 10*2,5" -1,5km; "ПВ-1 2,5" - 2,0km
11	9000	FLOWSiC600 G2500 DN300 (1:50) min 80 max 4000	Gas metering cabinet	GPRC - 12/18 - 2L - 250x300 - 3/3 FL + MB5 DN150 PN16 + PS/79-2 + OS/80X- BPA	Transformer substation consisting of: power transformer TMГ-6/10 кВ 2.5 MBA - 1 pc.; vacuum switch cells - 4 pcs.; power cables "АиВЕраПу-15 1*500/70 mm ² " 6 km.; Outdoor switchgear consisting of: vacuum switch cells - 5 pcs; voltage transformer cell - 1 pc.; Surge arresters nonlinear - 5 pcs.; power transformers TMГ- 6/10 кВ 2.5 MBA - 1 pc.	
12	1500	S3F Delta G-400 DN150 (1:160) min 4 max 650	Gas metering cabinet	GPRC - 2L - 100x125 - 3/3 MBN- QA DN65x100 PN16 + OS/66-AP	Power cables "ААБл 10 3x240 mm ² " 1,65 km; transformer substation consisting of: power transformer-10/0,4 кВ 630 КВА; high-voltage load switches - 3 pcs.	
13	1500	S3F Delta G-400 DN150 (1:160) min 4 max 650	Gas metering cabinet	GPRC - 2L - 100x125 - 3/3 MBN- QA DN65x100 PN16 + OS/66-AP	Power cables "ААБл 10 3x240 mm ² " 1,65 km	
14	1500	S3F Delta G-400 DN150 (1:160) min 4 max 650	Gas metering cabinet	GPRC - 2L - 100x125 - 3/3 MBN- QA DN65x100 PN16 + OS/66-AP	Power cables "ААБл 10 3x240 mm ² " 1,65 km	A total of 3 pcs. of 10 kV cells including: A relay protection and automation (RPA) panel with a microprocessor device and power direction - 1 pc.
15	1500	S3F Delta G-400 DN150 (1:160) min 4 max 650	Gas metering cabinet	GPRC - 2L - 100x125 - 3/3 MBN- QA DN65x100 PN16 + OS/66-AP	Transformer substation consisting of: power transformer TMГ-6/0,4 кВ 630 КВА; high-voltage load switches - 3 pcs; panel equipment "ЦО-90" - 3 pcs.; power cables "ААБл 10 3x240 mm ² " 1,65 km; "ААБл 10 3x120 mm ² " 2 km ; power cables "TMГ-6/0,4 kV 1 MDA"	Vacuum switch 1 pc.; Surge arresters nonlinear - 3 pcs.; Current transformer -3 pcs; Power cables "КВВГЕНр 4*2,5" -0,45km ; "КВВГЕНр 10*2,5" -0,45km; "ПВ-1 2,5" - 0,6km
16	11000	FLOWSiC600 G2500 DN300 (1:50) min 80 max 4000	Gas metering cabinet	GPRC - 12/18 - 2L - 250x300 - 3/3 FL + MB5 DN150 PN16 + PS/79-2 + OS/80X- BPA	Transformer substation consisting of: power transformer TMГ-6/10 кВ 2.5 MBA - 1 pc.; vacuum switch cells - 4 pcs.; power cables "АиВЕраПу-15 1*500/70 mm ² " 2.3 km.; Outdoor switchgear consisting of: vacuum switch cells - 5 pcs; voltage transformer cell - 1 pc.; Surge arresters nonlinear - 5 pcs.; power transformer TMГ- 6/10 кВ 2.5 MBA - 1 pc.	
17	3500	FLOWSiC600 G1000 DN200 (1:30) min 50 max 1600	Gas metering cabinet	GPRC - 10/16 - 2L - 150x200 - 3/3 MBN-QA DN100x200 PN16 + OS/66- AP	Power cables "ААБл 10 3x240 mm ² " 1,65 km; transformer substation consisting of: power transformer-10/0,4 кВ 630 КВА; high-voltage load switches - 3 pcs;	
18	250	G-65 Delta SE G-65 DN50 (1:200) min 0.5 max 100	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP	Power cables "ААБл 10 3x240 mm ² " 1,65 km	
19	250	G-65 Delta SE G-65 DN50 (1:200) min 0.5 max 100	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP	Power cables "ААБл 10 3x240 mm ² " 1,65 km	A total of 7 pcs. of 10 kV cells including: A relay protection and automation (RPA) panel with

20	250	G-65 Delta SE G-65 DN50 (1:200) min 0.5 max 100	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP	Power cables "ААБл 10 3x240 mm ² " 1,65 km	a microprocessor device and power direction - 1 pc. Vacuum switch 1 pc.; Surge arresters nonlinear - 3 pcs. Current transformer -3 pcs; Power cables "КВВГЕнг 4*2,5" 1,05km ; "КВВГЕнг 10*2,5"-1,05km; "ПВ-1 2,5" - 1,4km
21	3000	TZ/FLUXI G650 DN200 (1:20) min 50 max 1000 (G- 650 Delta only D200 S3F Delta G-650 DN150 (1:200) min 5	Gas metering cabinet	GPRC - 10/16 - 2L - 150x200 - 3/3 MBN-QA DN100x200 PN16 + OS/66-AP	Transformer substation consisting of: power transformer TMГ-6/0,4 кV 630 KBA; high-voltage load switches - 3 pcs; panel equipment "ЩО-90" - 3 pcs.; power cables "АпвЕраПу-15 1*500/70 mm ² " 2,3 km.; "ААБл 10 3x120 mm ² " 2 km;	
22	8000	FLOWSIC600 G2500 DN300 (1:50) min 80 max 4000	Gas metering cabinet	GPRC - 12/18 - 2L - 250x300 - 3/3 FL + MB5 DN150 PN16 + PS/79-2 + OS/80X- BPA	Transformer substation consisting of: power transformer TMГ-6/10 кV 2.5 MBA - 1 pc.; vacuum switch cells - 4 pcs.; power cables "АпвЕраПу-15 1*500/70 mm ² " 6 km.; Outdoor switchgear consisting of: vacuum switch cells - 5 pcs; voltage transformer cell - 1 pc.; Surge arresters nonlinear - 5 pcs.; power transformers TMГ-6/0,4 кV 1 MBA ; TMГ-10/0,4 кV 1 MBA	A total of 3 pcs. of 10 kV cells including: A relay protection and automation (RPA) panel with a microprocessor device and power direction - 1 pc. Vacuum switch 1 pc.; Surge arresters nonlinear - 3 pcs.; Current transformer -3 pcs; Power cables "КВВГЕнг 4*2,5" -0,45km ;
23	2000	S3F Delta G-400 DN150 (1:160) min 4 max 650	Gas metering cabinet	GPRC - 9/15 - 2L - 100x150 - 3/3 MBN-QA DN65x100 PN16 + OS/66-AP	Transformer substation consisting of: power transformer TMГ-6/0,4 кV 630 KBA; high-voltage load switches - 3 pcs; panel equipment "ЩО-90" - 3 pcs.; power cables "ААБл 10 3x240 mm ² " 1,65 km; "ААБл 10 3x120 mm ² " 2 km; Outdoor switchgear consisting of: vacuum switch cells - 5 pcs; voltage transformer cell - 1 pc.; Surge arresters nonlinear - 5	A total of 5 pcs. of 10 kV cells including: A relay protection and automation (RPA) panel with a microprocessor device and power direction - 1 pc. Vacuum switch 1 pc.; Surge arresters nonlinear - 3 pcs.; Current transformer -3 pcs; Power cables "КВВГЕнг 4*2,5" -0,75km ;
24	300	G-65 Delta SE G-65 DN50 (1:200) min 0.5 max 100	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP	Power cables "ААБл 1 4x120 mm ² " 0,2 km	
25	700	FLOWSIC500 G160 DN100 (1:50) min 5 max250 (Delta SE G-160 DN80 (1:200) min 1.3 max 250	Gas metering cabinet	GPRC - 6/8 - 2L - 65x80 - 3/3 MBN-QA DN40x80 PN16 + OS/66-AP	Power cables "ААБл 1 4x120 mm ² " 0,2 km; transformer substation consisting of: power transformer-10/0,4 кV 630 KBA; high-voltage load switches - 3 pcs; panel equipment "ЩО-90" - 3 pcs.;	
26	700	FLOWSIC500 G160 DN100 (1:50) min 5 max250 (Delta SE G-160 DN80 (1:200) min 1.3 max 250	Gas metering cabinet	GPRC - 6/8 - 2L - 65x80 - 3/3 MBN-QA DN40x80 PN16 + OS/66-AP	Power cables "ААБл 1 4x120 mm ² " 0,2 km; transformer substation consisting of: power transformer-10/0,4 кV 630 KBA; high-voltage load switches - 3 pcs; panel equipment "ЩО-90" - 3 pcs.;	

27	200	Delta Compact G-40 DN50 (1:200) min 0,3 max 65	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP		
28	200	Delta Compact G-40 DN50 (1:200) min 0,3 max 65	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP		
29	300	G-65 Delta SE G-65 DN50 (1:200) min 0,5 max 100	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP		
30	250	G-65 Delta SE G-65 DN50 (1:200) min 0,5 max 100	Gas metering cabinet	GPRC - 5/5 - 2L - 50x65 - 3/3 A/149-AP DN50 PN16 + OS/66- AP		
31	70	Delta Compact G16 DN50 (1:100) min 0,25 max 25	Gas metering cabinet	GPRC - 2/2 - 2L - 25x32 - 3/3/74-AP 3/4"x1/4"		
32	70	Delta Compact G16 DN50 (1:100) min 0,25 max 25	Gas metering cabinet	GPRC - 2/2 - 2L - 25x32 - 3/3/74-AP 3/4"x1/4"		
33	70	Delta Compact G16 DN50 (1:100) min 0,25 max 25	Gas metering cabinet	GPRC - 2/2 - 2L - 25x32 - 3/3/74-AP 3/4"x1/4"		
34	70	Delta Compact G16 DN50 (1:100) min 0,25 max 25	Gas metering cabinet	GPRC - 2/2 - 2L - 25x32 - 3/3/74-AP 3/4"x1/4"		
35	70	Delta Compact G16 DN50 (1:100) min 0,25 max 25	Gas metering cabinet	GPRC - 2/2 - 2L - 25x32 - 3/3/74-AP 3/4"x1/4"		
36	70	Delta Compact G16 DN50 (1:100) min 0,25 max 25	Gas metering cabinet	GPRC - 2/2 - 2L - 25x32 - 3/3/74-AP 3/4"x1/4"		
37	70	Delta Compact G16 DN50 (1:100) min 0,25 max 25	Gas metering cabinet	GPRC - 2/2 - 2L - 25x32 - 3/3/74-AP 3/4"x1/4"		
total	57680					

Note: References to a specific trade mark, firm, source of origin or manufacturer should read in conjunction with "or equivalent"