

Low Voltage VFD GDL Series Filter Option Brochure



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Corporate Introduction

INVT (Shenzhen INVT Electric Co., Ltd) has been concentrating on industry automation and energy power since its foundation in 2002 and is committed to "Providing the best product and service to allow customers more competitiveness". INVT goes public in 2010 and is the first A-share listed company (002334) in Shenzhen Stock Exchange in the industry. At present, INVT owns 15 subsidiaries and more than 4000 employees, over 40 branches, forming a sales network covering more than 100 overseas countries and regions.

INVT has been awarded as the Key High-tech Enterprise of National Torch Plan based on mastering of key technologies in power electronics, auto control and IT. With business covering industry automation, electric vehicle, network power and rail transit, INVT has established 11 R&D centers nationwide, boasts more than 1300 patents and owns the first lab in the industry awarded ACT qualification from TÜV SÜD, UL-WTDP and CNAS National Lab. The industrial parks in Shenzhen and Suzhou aim to provide customers with advanced integrated product development design management, comprehensive product R&D test and auto informational production. The worldwide INVT branches and warranty service centers are ready to offer customers all-around back-ups including professional solutions, technical trainings and service support.

In the next decade, INVT will continue to take "Honesty and Integrity, Professionalism and Excellence" as our business philosophy, enhance core business sectors including industrial automation, electric vehicle, network power and rail transit based on the three major technologies in industry automation and energy power fields, and strive to become a leading, responsible and harmonic international professional group armed with proper product structure, leading technologies, efficient management, robust profitability and superior competitiveness.



Industrial Park in Suzhou

Group's core industrial base and R&D center in East China

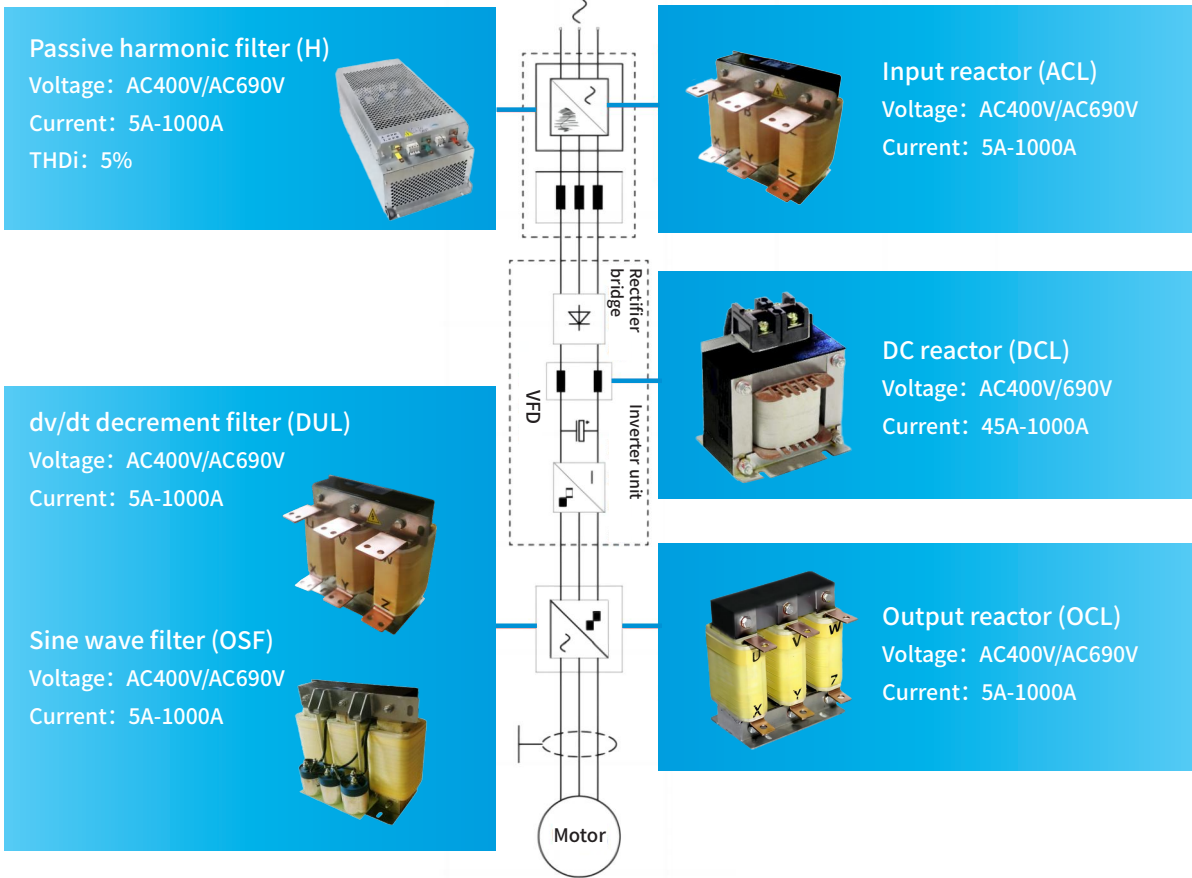


Industrial Park in Guangming Shenzhen

Group headquarters, new product development and new business incubation base



Low voltage VFD filter option solution



Recommendation of motor cable lengths corresponding to different output filters

Non-shielded cable length	50m-150m	150m-450m	450m-1000m
Shielded cable length	30m-100m	100m-230m	230m-500m
Output reactor category	Output reactor (1% output voltage drop)	/	/
	/	dv/dt decrement filter	/
	/	/	Sine filter

Reactor and filter naming rules

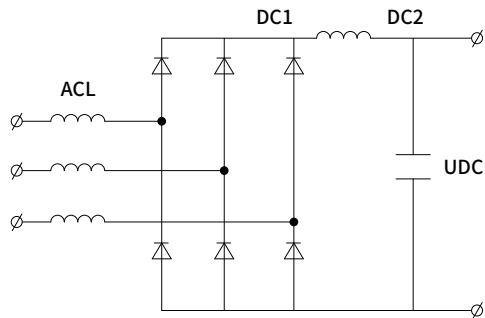
GDL-H 1000-4 AL-5%

① ② ③ ④ ⑤ ⑥

Field	Description	Naming example
①	Product series	GDL: GDL series filter option
②	Filter category	DCL: DC reactor ACL: Input reactor OCL: Output reactor DUL: dv/dt filter OSF: Sine filter H: Passive harmonic filter
③	Rated current	1000: 1000A
④	Voltage	-4: 400V /480V -6: 690V
⑤	Material	CU: Copper AL: Aluminum
⑥	Performance	5%: Empty by default Note: It indicates the harmonic current distortion factors for passive harmonic filter, while it is empty for the others.

DC reactors

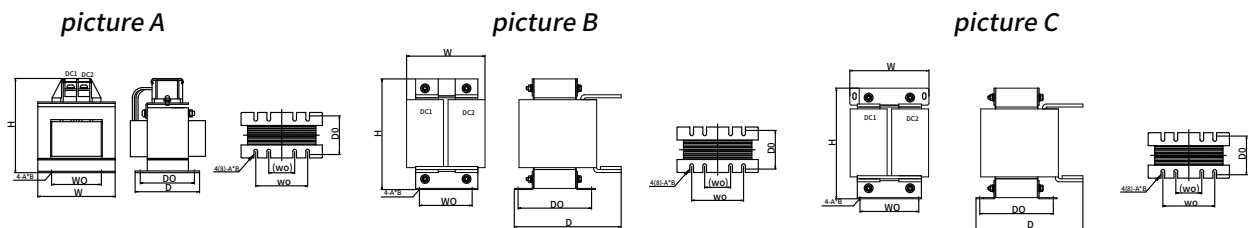
- **Application circuit:** On the VFD DC bus side, to reduce the input side current distortion rate, increase the power factor, and protect the DC bus capacitors.



Performance

Rated voltage	3PH 400V/690V 50Hz/60Hz (AC input voltage for VFDs)
Insulation class	F
Rated noise	≤ 75dB
Electric strength	AC 3000V/AC 4200V 50Hz 1min Leakage current ≤ 5mA
Working environment temperature	-25°C -45°C
Cooling method	Natural cooling
Standards	GB/T 1094.6-2011: Reactors; GB/T 19212.1-2023: General Requirements and Tests; Compliant with RoHS standards; Compliant with CE certification

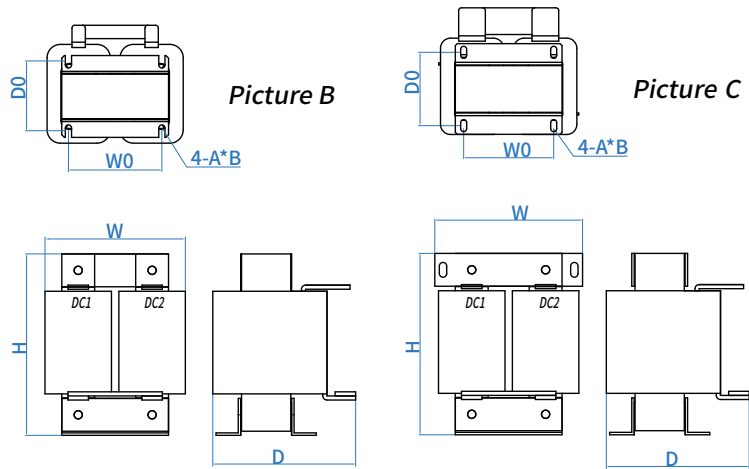
Dimensional and technical parameters



Note:
 Among the markings on the products, DC1 indicates input terminal, while DC2 indicates output terminal
 W0 is the spacing between base fixing screws. For certain models, the base may have 8 fixing screws, hence there are two W0 parameters
 In the catalogue, Wmax, Dmax, and Hmax represent the maximum installation dimensions

System voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, Reactor insulation class: Class F, Aluminium

Model	Picture No.	VFD power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0/(W0)	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-DCL0100-4AL	A	37	100	540	9.78	113	14	158	148	203	125	105	10*20	320*220*290	13.08
GDL-DCL0125-4AL		45	125	450	10.25	120	15	158	133	203	125	90	10*20	320*220*290	13.55
GDL-DCL0160-4AL		55	160	360	12	147	18	158	148	208	125	105	10*20	320*220*290	15.3
GDL-DCL0210-4AL	B	75	210	330	12.5	229	29	174	173	207	100 (130)	98	10*20	320*220*290	15.8
GDL-DCL0210-4AL		90	210	330	12.5	229	29	174	173	207	100 (130)	98	10*20	320*220*290	15.8
GDL-DCL0255-4AL		110	255	260	22.6	227	28	208	190	258	176	115	11*18	320*420*390	27.7
GDL-DCL0300-4AL		132	300	260	24.85	222	28	208	190	258	176	115	11*18	320*420*390	29.95
GDL-DCL0365-4AL		160	365	170	23.8	278	35	208	212	256	176	115	11*18	320*420*390	30
GDL-DCL0455-4AL		185	455	90	26	288	36	223	213	281	166.5	117	11*18	320*420*390	32.2
GDL-DCL0455-4AL		200	455	90	26	288	36	223	213	281	166.5	117	11*18	320*420*390	32.2
GDL-DCL0505-4AL		220	505	60	27	269	34	223	213	283	191	117	11*18	420*450*390	33.2
GDL-DCL0550-4AL		250	550	50	30.5	263	33	223	220	283	191	127	11*18	420*450*390	36.7
GDL-DCL0675-4AL		280	675	50	30.5	323	40	223	220	283	191	127	11*18	420*450*390	36.7
GDL-DCL0675-4AL		315	675	50	30.5	323	40	223	220	283	191	127	11*18	420*450*390	36.7
GDL-DCL0810-4AL		355	810	50	46	405	51	258	244	325	200	144	11*18	420*450*450	58
GDL-DCL0810-4AL		400	810	50	46	405	51	258	244	325	200	144	11*18	420*450*450	58
GDL-DCL1000-4AL		450	1000	50	57	569	71	258	251	358	200	146	11*18	420*450*450	69
GDL-DCL1000-4AL		500	1000	50	57	569	71	258	251	358	200	146	11*18	420*450*450	69



Note:
 Among the markings on the products, DC1 indicates input terminal, while DC2 indicates output terminal
 In the catalogue, Wmax, Dmax, and Hmax represent the maximum installation dimensions

System voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, Reactor insulation class: Class F, Copper															
Model	Picture No.	VFD power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-DCL0095-4CU	B	37	95	630	10.1	77.5	4.9	160	140	190	105	75	7*14	240*220*270	13
GDL-DCL0125-4CU		45	125	540	13.5	77.1	6.8	165	170	225	115	95	7*14	320*270*330	17.5
GDL-DCL0145-4CU		55	145	450	14.5	83.4	6.5	170	170	225	115	95	7*14	320*270*330	18.5
GDL-DCL0185-4CU		75	185	330	16.6	116.2	6.4	175	175	225	115	95	7*14	320*270*330	21
GDL-DCL0220-4CU		90	220	270	20.8	135.2	9.3	220	180	250	135	100	9*18	316*266*383	25.5
GDL-DCL0260-4CU		110	260	230	22.6	150.4	9.1	220	190	250	135	100	9*18	316*266*383	27
GDL-DCL0320-4CU		132	320	180	27.2	132.5	11.3	220	200	250	135	110	9*18	316*266*383	32
GDL-DCL0390-4CU		160	390	140	29.1	149.6	12.4	220	210	250	135	115	9*18	316*266*383	33.5
GDL-DCL0480-4CU		185	480	110	33.2	164.2	13.9	220	220	250	135	125	9*18	316*266*383	38
GDL-DCL0480-4CU		200	480	110	33.2	164.2	13.9	220	220	250	135	125	9*18	316*266*383	38
GDL-DCL0580-4CU	C	220	580	90	39.7	188.5	16.7	245	225	285	150	140	9*18	396*296*443	45
GDL-DCL0580-4CU		250	580	90	39.7	188.5	16.7	245	225	285	150	140	9*18	396*296*443	45
GDL-DCL0740-4CU		280	740	70	47.3	219.4	15.4	245	260	290	150	140	9*18	396*296*443	52.5
GDL-DCL0740-4CU		315	740	70	47.3	219.4	15.4	245	260	290	150	140	9*18	396*296*443	52.5
GDL-DCL1000-4CU		355	1000	51	56.1	362.2	23.1	280	255	380	165	140	9*18	466*356*528	63
GDL-DCL1000-4CU		400	1000	51	56.1	362.2	23.1	280	255	380	165	140	9*18	466*356*528	63
GDL-DCL1000-4CU		450	1000	51	56.1	362.2	23.1	280	255	380	165	140	9*18	466*356*528	63
GDL-DCL1000-4CU		500	1000	51	56.1	362.2	23.1	280	255	380	165	140	9*18	466*356*528	63

System voltage: 3PH-AC690V 50Hz/3-AC690V 60Hz, Reactor insulation class: Class F, Aluminium

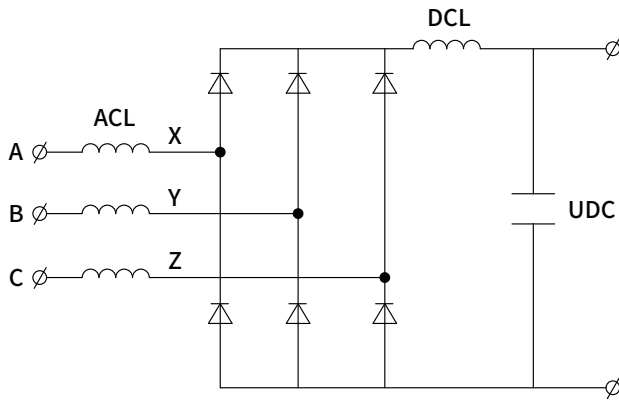
Model	Picture No.	VFD power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-DCL0045-6AL	B	22	45	1800	6.5	49.7	5.7	155	130	190	105	65	7*14	240*220*270	9.5
GDL-DCL0050-6AL		30	50	1800	6.9	54.5	5.4	155	130	190	105	65	7*14	240*220*270	10
GDL-DCL0080-6AL		37	80	700	7	44.3	5.8	160	130	190	105	65	7*14	240*220*270	10
GDL-DCL0080-6AL		45	80	700	7	45.8	4.9	160	130	190	105	65	7*14	240*220*270	10
GDL-DCL0080-6AL		55	80	700	7	50.3	5.4	160	130	190	105	65	7*14	240*220*270	10
GDL-DCL0165-6AL		75	165	350	19.7	56	5.2	220	185	250	135	110	9*18	316*266*383	24.5
GDL-DCL0165-6AL		90	165	350	19.7	62.3	5.6	220	185	250	135	110	9*18	316*266*383	24.5
GDL-DCL0165-6AL		110	165	350	19.7	90.6	7	220	185	250	135	110	9*18	316*266*383	24.5
GDL-DCL0265-6AL		132	265	230	24.5	102	12.6	220	205	250	135	125	9*18	316*266*383	29
GDL-DCL0265-6AL		160	265	230	24.5	102.2	19.5	220	205	250	135	125	9*18	316*266*383	29
GDL-DCL0265-6AL		185	265	230	24.5	105.5	19.5	220	205	250	135	125	9*18	316*266*383	29
GDL-DCL0330-6AL		200	330	180	25.6	106.8	16.7	220	210	250	135	125	9*18	316*266*383	30
GDL-DCL0330-6AL		220	330	180	25.6	108.8	19.7	220	210	250	135	125	9*18	316*266*383	30
GDL-DCL0330-6AL		250	330	180	25.6	117.9	17.3	220	210	250	135	125	9*18	316*266*383	30
GDL-DCL0475-6AL		C	280	475	114	31.8	118.2	18.3	250	235	285	150	140	9*18	396*296*443
GDL-DCL0475-6AL	315		475	114	31.8	156	21.9	250	235	285	150	140	9*18	396*296*443	37
GDL-DCL0475-6AL	355		475	114	31.8	164.7	25	250	235	285	150	140	9*18	396*296*443	37
GDL-DCL0600-6AL	400		600	113	35	164.1	18.1	250	245	285	150	140	9*18	396*296*443	40
GDL-DCL0600-6AL	450		600	113	35	166.1	20.8	250	245	285	150	140	9*18	396*296*443	40
GDL-DCL0750-6AL	500		750	80	45.4	172.6	26.5	280	265	380	165	140	9*18	466*356*528	52.5
GDL-DCL0750-6AL	560		750	80	45.4	219.8	36	280	265	380	165	140	9*18	466*356*528	52.5
GDL-DCL0805-6AL	630		805	80	45.4	258.3	33.2	280	265	380	165	140	9*18	466*356*528	52.5

System voltage: 3PH-AC690V 50Hz/3-AC690V 60Hz, Reactor insulation class: Class F, Copper

Model	Picture No.	VFD power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-DCL0045-6CU	B	22	45	1800	7.1	40	5.7	150	130	190	105	65	7*14	240*220*270	10
GDL-DCL0050-6CU		30	50	1800	7.1	48.1	5.5	150	130	190	105	65	7*14	240*220*270	10
GDL-DCL0080-6CU		37	80	700	7.9	36.1	5.8	155	130	190	105	65	7*14	240*220*270	11
GDL-DCL0080-6CU		45	80	700	7.9	41.3	4.9	155	130	190	105	65	7*14	240*220*270	11
GDL-DCL0080-6CU		55	80	700	7.9	45.9	5.4	155	130	190	105	65	7*14	240*220*270	11
GDL-DCL0165-6CU		75	165	350	21	52.7	5.4	220	180	250	135	110	9*18	316*266*383	25.5
GDL-DCL0165-6CU		90	165	350	21	54.2	5.8	220	180	250	135	110	9*18	316*266*383	25.5
GDL-DCL0165-6CU		110	165	350	21	90.9	13.6	220	180	250	135	110	9*18	316*266*383	25.5
GDL-DCL0265-6CU		132	265	230	26.4	92	12.7	220	205	250	135	125	9*18	316*266*383	31
GDL-DCL0265-6CU		160	265	230	26.4	95.4	19.6	220	205	250	135	125	9*18	316*266*383	31
GDL-DCL0265-6CU		185	265	230	26.4	97.3	19.7	220	205	250	135	125	9*18	316*266*383	31
GDL-DCL0330-6CU		200	330	180	28.3	105.8	16.8	220	205	250	135	125	9*18	316*266*383	33
GDL-DCL0330-6CU		220	330	180	28.3	103.1	19.8	220	205	250	135	125	9*18	316*266*383	33
GDL-DCL0330-6CU		250	330	180	28.3	105.8	17.6	220	205	250	135	125	9*18	316*266*383	33
GDL-DCL0475-6CU		C	280	475	114	36.5	112.1	18.5	245	225	285	150	140	9*18	396*296*443
GDL-DCL0475-6CU	315		475	114	36.5	144.8	22.2	245	225	285	150	140	9*18	396*296*443	41.5
GDL-DCL0475-6CU	355		475	114	36.5	154.9	25.5	245	225	285	150	140	9*18	396*296*443	41.5
GDL-DCL0600-6CU	400		600	113	42.6	146.5	18.5	245	235	285	150	140	9*18	396*296*443	47.5
GDL-DCL0600-6CU	450		600	113	42.6	151.8	21.3	245	235	285	150	140	9*18	396*296*443	47.5
GDL-DCL0750-6CU	500		750	80	51.3	161.2	27.4	280	255	380	165	140	9*18	466*356*528	58.5
GDL-DCL0750-6CU	560		750	80	51.3	214.1	36.8	280	255	380	165	140	9*18	466*356*528	58.5
GDL-DCL0805-6CU	630		805	80	51.3	246.9	33.8	280	255	380	165	140	9*18	466*356*528	58.5

Input reactors

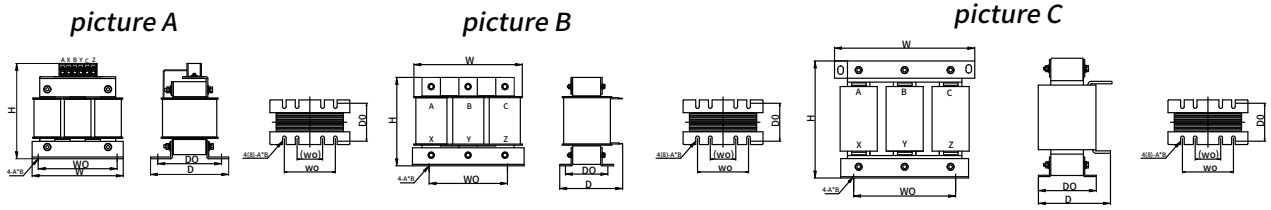
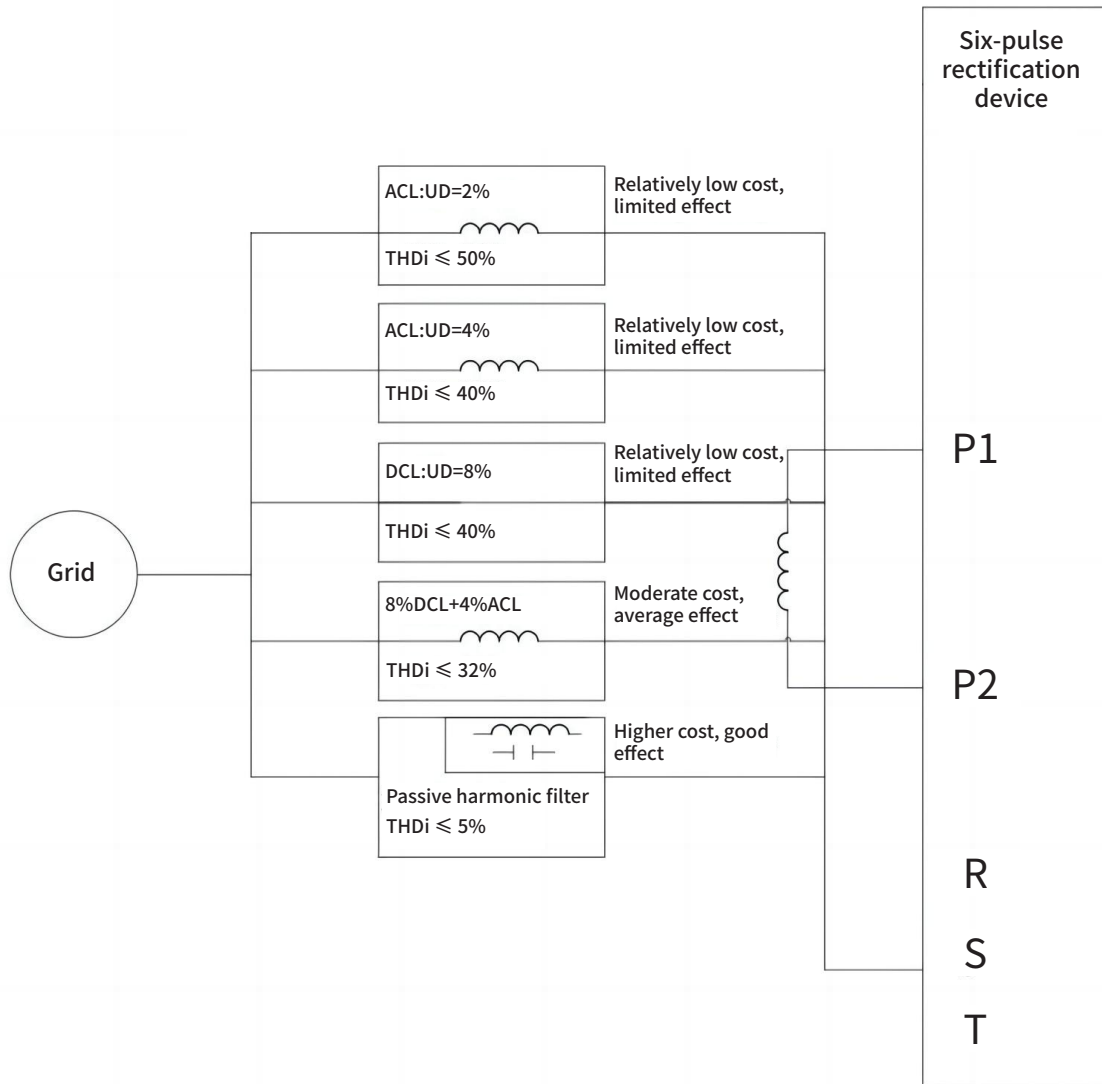
- Application circuit:** Input side of a six-pulse rectification device (such as VFD, DC speed regulator, and electric car charging station centralized rectification cabinet), to improve the power factor, suppress the shock current, and reduce the device caused harmonic interference to the grid.



Performance

Rated voltage	3PH-AC400V/AC690V, 50HZ/60Hz
Insulation class	F
Rated noise	≤ 75 d B
Electric strength	AC3000V/AC4200V 50Hz 1min Leakage current ≤ 5m A
Working environment temperature	-25°C ~45°C
Cooling method	Natural cooling
Standards	GB/T 1094.6-2011: Reactors; GB/T 19212.1-2023: General Requirements and Tests; Compliant with RoHS standards; Compliant with CE certification

■ VFD input side solution

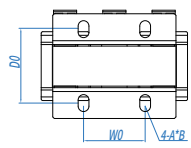


Note:

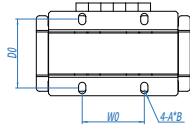
Among the markings on the products, A, B, and C indicate three-phase input terminals, while X, Y, and Z indicates three-phase output terminals
 W0 is the spacing between base fixing screws. For certain models, the base may have 8 fixing screws, hence there are two W0 parameters
 In the catalogue, Wmax, Dmax, and Hmax represent the maximum installation dimensions

■ For input reactors (UD ≥ 1.5%)

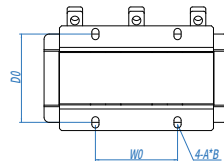
System voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, Reactor insulation class: Class F, Aluminium															
Model	Picture No.	Six-pulse rectification power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0/(W0)	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-ACL0035-4AL	B	11	35	360	3.29	50	7	168	140	138	120 (95)	76	6*15	320*220*290	6.59
GDL-ACL0040-4AL		15	40	280	3.26	55	7	168	138	133	120 (95)	76	6*15	320*220*290	6.56
GDL-ACL0051-4AL		18.5	51	240	3.88	59	8	168	138	138	120 (95)	72	6*15	320*220*290	7.18
GDL-ACL0051-4AL		22	51	240	3.88	59	8	168	138	138	120 (95)	72	6*15	320*220*290	7.18
GDL-ACL0070-4AL		30	70	156	6.06	84	11	208	158	158	150 (120)	92	11*18	320*220*290	9.36
GDL-ACL0090-4AL		37	90	117	7.09	90	12	213	168	118	150	88	11*18	320*220*290	10.39
GDL-ACL0110-4AL		45	110	94	8.22	105	25	208	163	143	150	88	11*18	320*220*290	11.52
GDL-ACL0150-4AL		55	150	70	12.8	125	33	253	178	148	182 (150)	98	11*18	320*220*290	16.1
GDL-ACL0150-4AL		75	150	70	12.8	125	33	253	178	148	182 (150)	98	11*18	320*220*290	16.1
GDL-ACL0220-4AL		C	90	220	56	19.7	145	35	248	174	228	214 (182)	98	11*18	320*420*390
GDL-ACL0220-4AL	110		220	56	19.7	145	35	248	174	228	214 (182)	98	11*18	320*420*390	27.7
GDL-ACL0265-4AL	132		265	48	20.95	160	40	248	180	231	214 (182)	103	11*18	320*420*390	26.05
GDL-ACL0330-4AL	160		330	42	22.25	175	45	248	179	233	214 (182)	103	11*18	320*420*390	27.35
GDL-ACL0390-4AL	185		390	36	25.3	200	54	248	196	249	214 (182)	108	11*18	320*420*390	30.4
GDL-ACL0390-4AL	200		390	36	25.3	200	54	248	196	249	214 (182)	108	11*18	320*420*390	30.4
GDL-ACL0450-4AL	220		450	28	31.9	240	65	293	211	264	243	125	12*20	420*450*390	38.1
GDL-ACL0500-4AL	250		500	27	35.9	265	75	293	215	273	243	140	12*20	420*450*390	42.1
GDL-ACL0500-4AL	280		500	27	35.9	265	75	293	215	273	243	140	12*20	420*450*390	42.1
GDL-ACL0580-4AL	315		580	24	38.65	290	78	293	238	283	243	140	12*20	530*370*450	48.05
GDL-ACL0660-4AL	355		660	20	40.1	285	75	293	237	294	243	140	12*20	530*370*450	49.5
GDL-ACL0715-4AL	400		715	18	42.5	296	82	293	237	320	243	140	12*20	530*370*450	51.9
GDL-ACL0840-4AL	450		840	17.5	48	315	87	323	256	311	260	135	15*25	530*370*450	57.4
GDL-ACL1000-4AL	500		1000	14	55	345	95	323	257	350	260	135	15*25	530*370*450	64.4



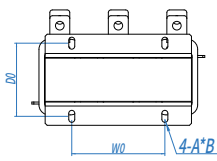
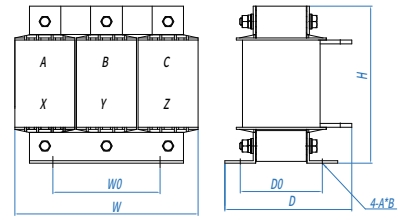
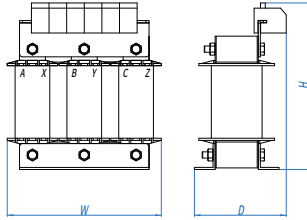
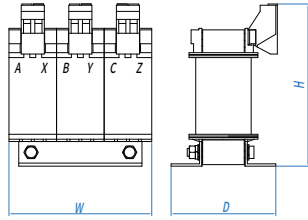
Picture A



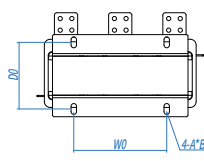
Picture B



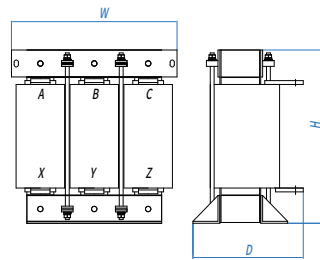
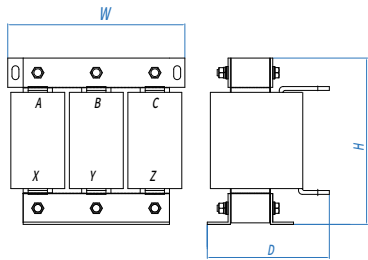
Picture C



Picture D



Picture E



Note:

Among the markings on the products, A, B, and C indicate three-phase input terminals, while X, Y, and Z indicates three-phase output terminals. In the catalogue, Wmax, Dmax, and Hmax represent the maximum installation dimensions.

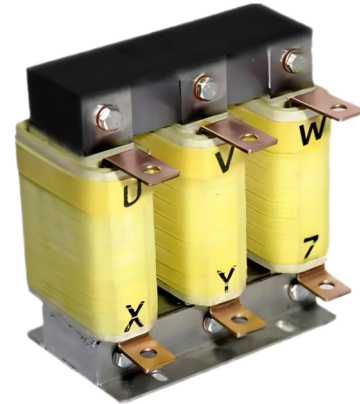
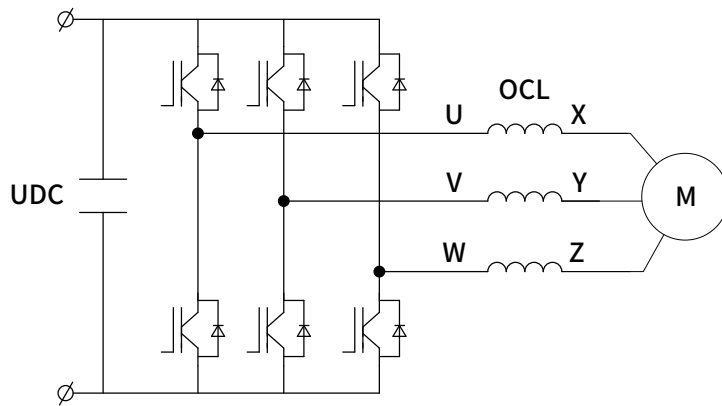
System voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, Reactor insulation class: Class F, Copper															
Model	Picture No.	Six-pulse rectification power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-ACL0005-4CU	A	0.75	5	2800	1.5	13	5.7	110	85	120	40	48	7*11	240*220*270	3.5
GDL-ACL0005-4CU		1.5	5	2800	1.5	13	5.7	110	85	120	40	48	7*11	240*220*270	3.5
GDL-ACL0006-4CU		2.2	6	2800	1.5	13	5.7	110	85	120	40	48	7*11	240*220*270	3.5
GDL-ACL0014-4CU		4	14	1400	2.6	20.3	8.7	135	90	135	50	53	7*11	240*220*270	4.5
GDL-ACL0020-4CU		5.5	20	1080	2.8	20.3	9.7	135	90	135	50	53	7*11	240*220*270	5
GDL-ACL0025-4CU		7.5	25	876	2.8	30.8	9.6	135	90	135	50	53	7*11	240*220*270	5
GDL-ACL0032-4CU	B	11	32	560	5.3	38.8	14.8	165	105	180	60	67	7*11	240*220*270	8.5
GDL-ACL0040-4CU		15	40	467	5.6	39.4	14.7	165	105	180	60	67	7*11	240*220*270	9
GDL-ACL0050-4CU	C	18.5	50	350	5.8	69	21.1	195	115	165	80	66	7*11	240*220*270	9.5
GDL-ACL0060-4CU		22	60	310	6.2	58.2	20.7	195	115	165	80	66	7*11	240*220*270	9.5
GDL-ACL0070-4CU		30	70	234	8.9	60.1	30.9	195	135	165	80	86	7*11	240*220*270	12
GDL-ACL0080-4CU		37	80	187	9.5	65.2	30.3	195	135	165	80	86	7*11	240*220*270	12.5
GDL-ACL0100-4CU		45	100	155	10.2	72.9	29.4	195	135	165	80	86	7*11	240*220*270	13.5
GDL-ACL0130-4CU		55	130	128	15.2	128	56.3	220	160	225	110	85	9*18	320*270*330	19.5
GDL-ACL0160-4CU		75	160	93.4	17.2	124.5	54.3	225	160	225	110	85	9*18	320*270*330	21.5
GDL-ACL0190-4CU		90	190	78	21.1	139.9	67	225	175	225	110	100	9*18	320*270*330	25
GDL-ACL0225-4CU		110	225	64	22.5	158.5	66	225	180	225	110	100	9*18	320*270*330	26.5
GDL-ACL0265-4CU		132	265	54	29.4	166	91.9	270	190	270	140	110	9*18	316*266*383	34
GDL-ACL0320-4CU	160	320	44	31.7	184.5	90.8	270	190	275	140	110	9*18	316*266*383	36.5	
GDL-ACL0400-4CU	185	400	35	38.9	182.5	113.5	310	200	285	170	110	11*18	396*296*443	44	
GDL-ACL0400-4CU	200	400	35	38.9	182.5	113.5	310	200	285	170	110	11*18	396*296*443	44	
GDL-ACL0485-4CU	D	220	485	29	51.6	209.7	119.8	310	225	285	170	135	11*18	396*296*443	56.5
GDL-ACL0485-4CU		250	485	29	51.6	209.7	119.8	310	225	285	170	135	11*18	396*296*443	56.5
GDL-ACL0550-4CU		280	550	26	53.7	231	120.1	310	225	285	170	135	11*18	396*296*443	59
GDL-ACL0610-4CU		315	610	23.4	57.9	228.6	117.4	310	225	285	170	135	11*18	396*296*443	63
GDL-ACL0800-4CU		355	800	17.5	76.7	345.1	202.7	370	260	380	190	135	13*26	466*356*528	89.5
GDL-ACL0800-4CU		400	800	17.5	76.7	345.1	202.7	370	260	380	190	135	13*26	466*356*528	89.5
GDL-ACL1000-4CU		450	1000	14	84	392.8	195.7	370	260	380	190	135	13*26	466*356*528	102
GDL-ACL1000-4CU		500	1000	14	84	392.8	195.7	370	260	380	190	135	13*26	466*356*528	102

System voltage: 3PH-AC690V 50Hz/3-AC690V 60Hz, Reactor insulation class: Class F, Copper															
Model	Picture No.	Six-pulse rectification power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-ACL0005-6CU	A	0.75	5	5100	2.6	17.1	10	135	90	135	50	52.5	7*11	240*220*270	4.5
GDL-ACL0005-6CU		1.5	5	5100	2.6	17.1	10	135	90	135	50	52.5	7*11	240*220*270	4.5
GDL-ACL0006-6CU		2.2	6	5100	2.6	17.1	10	135	90	135	50	52.5	7*11	240*220*270	4.5
GDL-ACL0010-6CU		4	10	2550	2.8	31.5	10.2	135	90	135	50	52.5	7*11	240*220*270	5
GDL-ACL0015-6CU	B	5.5	15	1700	5.4	32.7	17.3	165	115	185	60	67	7*11	240*220*270	8.5
GDL-ACL0020-6CU		7.5	20	1280	5.5	60.1	17.4	165	115	185	60	67	7*11	240*220*270	8.5
GDL-ACL0020-6CU		11	20	1280	5.5	60.1	17.4	165	115	185	60	67	7*11	240*220*270	8.5
GDL-ACL0030-6CU		15	30	850	8.7	50.1	30.4	195	130	210	80	86	7*11	320*270*330	13
GDL-ACL0030-6CU		18.5	30	850	8.7	50.1	30.4	195	130	210	80	86	7*11	320*270*330	13
GDL-ACL0045-6CU	C	22	45	565	13.3	85.3	48.5	225	150	190	110	85	9*18	320*270*330	17.5
GDL-ACL0045-6CU		30	45	565	13.3	85.3	48.5	225	150	190	110	85	9*18	320*270*330	17.5
GDL-ACL0050-6CU		37	50	565	13.3	85.3	48.5	225	150	190	110	85	9*18	320*270*330	17.5
GDL-ACL0060-6CU		45	60	425	15.1	141.7	56.7	225	150	225	110	85	9*18	320*270*330	19
GDL-ACL0090-6CU		55	90	282	16.8	165.9	54.2	225	150	225	110	85	9*18	320*270*330	21
GDL-ACL0090-6CU		75	90	282	16.8	165.9	54.2	225	150	225	110	85	9*18	320*270*330	21
GDL-ACL0110-6CU		90	110	230	21.1	169.3	70.1	225	175	225	110	100	9*18	320*270*330	25
GDL-ACL0150-6CU		110	150	170	24.4	182.2	68	230	175	220	110	100	9*18	320*270*330	28.5
GDL-ACL0150-6CU		132	150	170	24.4	182.2	68	230	175	220	110	100	9*18	320*270*330	28.5
GDL-ACL0200-6CU	D	160	200	128	33.6	178.5	99.9	270	185	275	140	110	9*18	316*266*383	38
GDL-ACL0200-6CU		185	200	128	33.6	178.5	99.9	270	185	275	140	110	9*18	316*266*383	38
GDL-ACL0250-6CU		200	250	102	37.9	207.9	95.4	270	185	275	140	110	9*18	316*266*383	42.5
GDL-ACL0250-6CU		220	250	102	37.9	207.9	95.4	270	185	275	140	110	9*18	316*266*383	42.5
GDL-ACL0300-6CU		250	300	85	44.6	202.1	129.2	310	190	285	170	110	11*18	396*296*443	49.5
GDL-ACL0300-6CU		280	300	85	44.6	202.1	129.2	310	190	285	170	110	11*18	396*296*443	49.5
GDL-ACL0400-6CU		315	400	64	59.3	247.5	149.4	310	225	285	170	135	11*18	396*296*443	64.5
GDL-ACL0400-6CU		355	400	64	59.3	247.5	149.4	310	225	285	170	135	11*18	396*296*443	64.5
GDL-ACL0480-6CU		400	480	53	70.1	382.6	216.6	370	230	380	190	135	13*26	466*356*528	77
GDL-ACL0480-6CU		450	480	53	70.1	382.6	216.6	370	230	380	190	135	13*26	466*356*528	77
GDL-ACL0600-6CU		500	600	42.5	74.7	413.9	209.2	370	230	380	190	135	13*26	466*356*528	82
GDL-ACL0600-6CU		560	600	42.5	74.7	413.9	209.2	370	230	380	190	135	13*26	466*356*528	82
GDL-ACL0800-6CU		E	630	800	32	100.5	503.8	351.7	440	285	410	240	172	14*28	486*381*558

System voltage: 3PH-AC690V 50Hz/3-AC690V 60Hz, Reactor insulation class: Class F, Aluminium															
Model	Picture No.	Six-pulse rectification power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-ACL0045-6AL	C	22	45	565	12.7	72.1	47.7	240	160	190	110	85	9*18	320*270*330	17
GDL-ACL0045-6AL		30	45	565	12.7	72.1	47.7	240	160	190	110	85	9*18	320*270*330	17
GDL-ACL0050-6AL		37	50	510	12.7	72.1	47.7	240	160	190	110	85	9*18	320*270*330	17
GDL-ACL0060-6AL		45	60	425	14.7	96.2	56	240	160	220	110	85	9*18	320*270*330	19
GDL-ACL0090-6AL		55	90	282	16.3	118.4	51.9	240	160	220	110	85	9*18	320*270*330	20.5
GDL-ACL0090-6AL		75	90	282	16.3	118.4	51.9	240	160	220	110	85	9*18	320*270*330	20.5
GDL-ACL0110-6AL		90	110	230	20.4	123.4	68	240	175	220	110	100	9*18	320*270*330	24.5
GDL-ACL0150-6AL		110	150	170	21.5	180.8	65	235	175	225	110	100	9*18	320*270*330	25.5
GDL-ACL0150-6AL		132	150	170	21.5	180.8	65	235	175	225	110	100	9*18	320*270*330	25.5
GDL-ACL0200-6AL		D	160	200	128	29.1	192.3	97.6	270	190	275	140	110	9*18	316*266*383
GDL-ACL0200-6AL	185		200	128	29.1	192.3	97.6	270	190	275	140	110	9*18	316*266*383	33.5
GDL-ACL0250-6AL	200		250	102	32.1	216.7	90.3	270	190	275	140	110	9*18	316*266*383	36.5
GDL-ACL0250-6AL	220		250	102	32.1	216.7	90.3	270	190	275	140	110	9*18	316*266*383	36.5
GDL-ACL0300-6AL	250		300	85	37.8	215.8	123.2	310	200	280	170	110	11*18	396*296*443	43
GDL-ACL0300-6AL	280		300	85	37.8	215.8	123.2	310	200	280	170	110	11*18	396*296*443	43
GDL-ACL0400-6AL	315		400	64	52.2	243.8	140.5	310	230	285	170	135	11*18	396*296*443	57.5
GDL-ACL0400-6AL	355		400	64	52.2	243.8	140.5	310	230	285	170	135	11*18	396*296*443	57.5
GDL-ACL0480-6AL	400		480	53	65.4	374	211.8	370	250	375	190	135	13*26	466*356*528	72.5
GDL-ACL0480-6AL	450		480	53	65.4	374	211.8	370	250	375	190	135	13*26	466*356*528	72.5
GDL-ACL0600-6AL	500		600	42.5	69.8	365	207.5	370	250	375	190	135	13*26	466*356*528	77
GDL-ACL0600-6AL	560		600	42.5	69.8	365	207.5	370	250	375	190	135	13*26	466*356*528	77
GDL-ACL0800-6AL	E		630	800	32	96.5	452.6	348.4	440	290	410	240	175	14*28	486*381*558

Output reactors

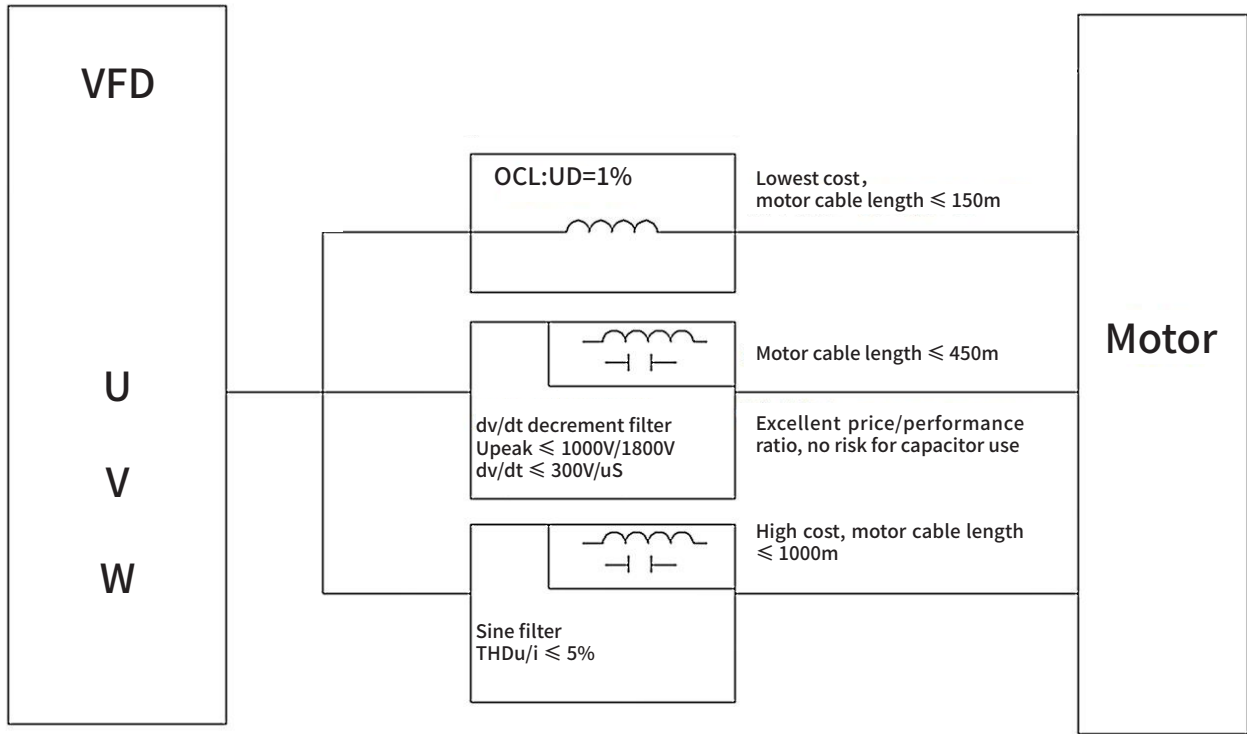
- **Application circuit:** VFD output side, to suppress the high-order harmonic current derived from the ripple current of the switching frequency, and reduce the dv/dt transient voltage reflected by the long cable traveling waves, so as to reduce motor eddy current loss and noise and protect the motor insulation.



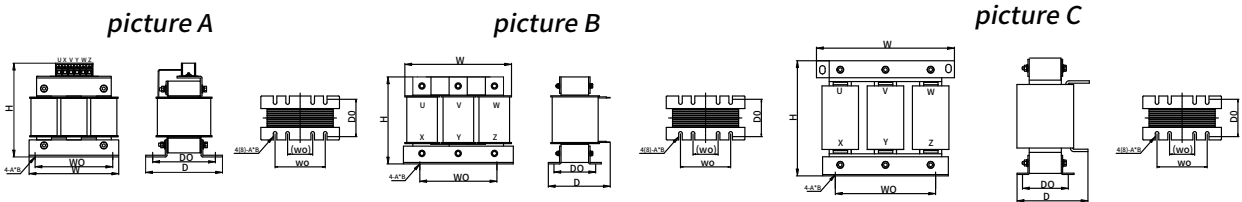
■ Performance

Rated voltage	3-AC400V/AC690V,50HZ/60Hz
Insulation class	F
Rated noise	≤ 75d B
Electric strength	AC3000V/AC4200V 50Hz 1min Leakage current ≤ 5m A
Working environment temperature	-25°C -45°C
Cooling method	Natural cooling
Standards	GB/T 1094.6-2011: Reactors; GB/T 19212.1-2023: General Requirements and Tests; Compliant with RoHS standards; Compliant with CE certification

■ VFD output side solution



■ Dimensional and technical parameters

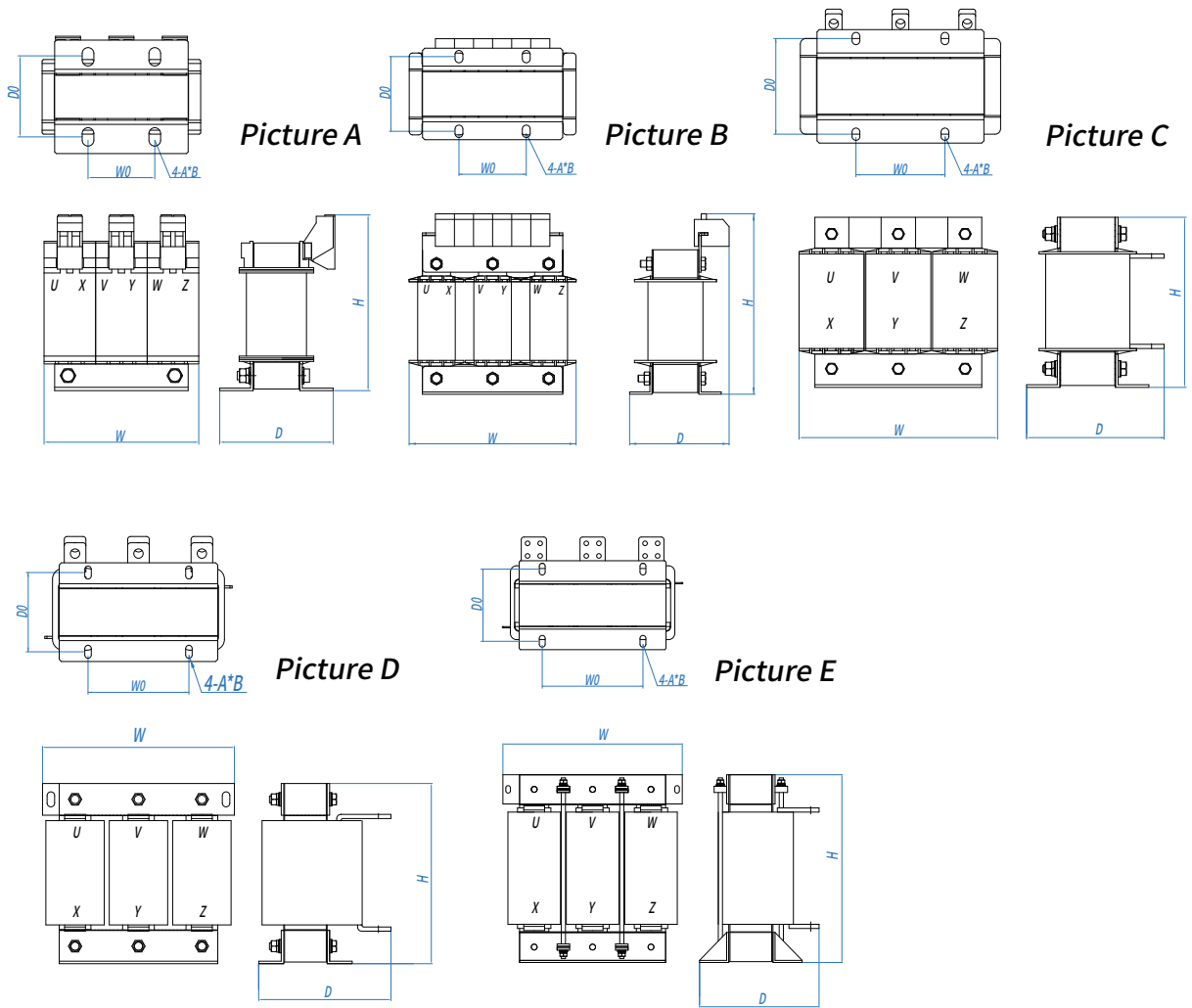


Note:

Among the markings on the products, U, V, and W indicate three-phase input terminals, while X, Y, and Z indicates three-phase output terminals
W0 is the spacing between base fixing screws. For certain models, the base may have 8 fixing screws, hence there are two W0 parameters
In the catalogue, Wmax, Dmax, and Hmax represent the maximum installation dimensions

■ For output reactors (UD=1%)

System voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, Reactor insulation class: Class F, Aluminium																
Model	Picture No.	Carrier frequency (\leqkHz)	VFD power (kW)	Rated current (A)	Inductance ($\mu</math>H)$	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
									W max	D max	H max	W0/(W0)	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-OCL0035-4AL	B	4	15	35	230	3.52	45	11	161	138	137	120 (95)	63	6*15	320*220*290	6.82
GDL-OCL0040-4AL		4	18.5	40	190	3.4	50	12	163	138	137	120 (95)	76	6*15	320*220*290	6.7
GDL-OCL0050-4AL		4	22	50	160	5.06	50	12	190	148	145	120	72	8.5*20	320*220*290	8.36
GDL-OCL0060-4AL		4	30	60	110	5.25	60	14	196	148	144	120	72	8.5*20	320*220*290	8.55
GDL-OCL0075-4AL		4	37	75	90	5.57	65	14	214	148	145	120 (95)	72	8.5*20	320*220*290	8.87
GDL-OCL0092-4AL		4	45	92	75	6.36	77	15	210	168	165	150	83	11*18	320*220*290	9.66
GDL-OCL0115-4AL		4	55	115	60	8.17	89	21	208	188	150	150	88	11*18	320*220*290	11.47
GDL-OCL0150-4AL		4	75	150	46	12.29	95	20	253	193	145	182 (150)	98	11*18	320*220*290	15.59
GDL-OCL0220-4AL		C	4	90	220	30	18.8	100	25	253	174	231	214 (182)	98	11*18	320*420*390
GDL-OCL0220-4AL	4		110	220	30	18.8	100	25	253	174	231	214 (182)	98	11*18	320*420*390	23.9
GDL-OCL0265-4AL	4		132	265	24	19.19	120	30	253	180	232	214 (182)	108	11*18	320*420*390	24.29
GDL-OCL0330-4AL	4		160	330	21	20	145	30	253	180	233	214 (182)	108	11*18	420*450*390	26.2
GDL-OCL0400-4AL	4		185	400	17	21.6	165	35	253	195	234	214 (182)	108	11*18	420*450*390	27.8
GDL-OCL0400-4AL	4		200	400	17	21.6	165	35	253	195	234	214 (182)	108	11*18	420*450*390	27.8
GDL-OCL0450-4AL	4		220	450	15	28	175	35	293	211	250	243	125	12*20	420*450*390	34.2
GDL-OCL0500-4AL	4		250	500	13	32.8	190	40	293	225	248	243	140	12*20	530*370*450	42.2
GDL-OCL0560-4AL	4		280	560	12	35.3	220	45	293	231	262	243	140	12*20	530*370*450	44.7
GDL-OCL0660-4AL	4		315	660	10.5	38.05	270	45	293	231	286	243	140	12*20	530*370*450	47.45
GDL-OCL0660-4AL	4		355	660	10.5	38.05	270	45	293	231	286	243	140	12*20	530*370*450	47.45
GDL-OCL0720-4AL	4		400	720	9.5	50	298	57	293	231	296	243	140	12*20	530*420*470	59.4
GDL-OCL0820-4AL	4		450	820	8.7	55	308	67	323	262	316	260	135	15*25	530*420*470	64.4
GDL-OCL1000-4AL	4	500	1000	7.5	55	310	70	323	262	349	260	135	15*25	530*420*470	64.4	



Note:
 Among the markings on the products, U, V, and W indicate three-phase input terminals, while X, Y, and Z indicates three-phase output terminals
 In the catalogue, Wmax, Dmax, and Hmax represent the maximum installation dimensions

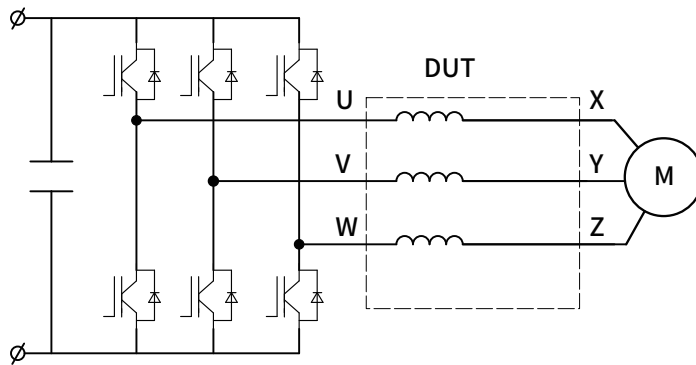
System voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, Reactor insulation class: Class F, Copper																
Model	Picture No.	Carrier frequency (\leqkHz)	VFD power (kW)	Rated current (A)	Inductance ($\mu</math>H)$	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
									W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-OCL0005-4CU	A	8	0.75	5	1400	1.5	18.2	8.5	110	85	120	40	48	7*11	240*220*270	4.5
GDL-OCL0005-4CU		8	1.5	5	1400	1.5	18.2	8.5	110	85	120	40	48	7*11	240*220*270	4.5
GDL-OCL0006-4CU		8	2.2	6	1400	1.5	18.2	8.5	110	85	120	40	48	7*11	240*220*270	4.5
GDL-OCL0010-4CU		8	4	10	700	2.6	21.9	7.9	135	90	135	50	53	7*11	240*220*270	5
GDL-OCL0014-4CU	B	8	5.5	14	540	2.8	19.2	12.6	135	90	135	50	53	7*11	240*220*270	8.5
GDL-OCL0020-4CU		8	7.5	20	438	2.8	29.1	11.8	135	90	135	50	53	7*11	240*220*270	8.5
GDL-OCL0025-4CU		8	11	25	280	5.3	32.5	12.1	165	105	180	60	67	7*11	240*220*270	9
GDL-OCL0032-4CU		4	15	32	233	5.6	39.4	24.5	165	105	180	60	67	7*11	240*220*270	8.5
GDL-OCL0040-4CU	C	4	18.5	40	175	5.8	69	29.5	195	115	165	80	66	7*11	240*220*270	9
GDL-OCL0045-4CU		4	22	45	155	6.2	58.2	27.8	195	115	165	80	66	7*11	240*220*270	9.5
GDL-OCL0060-4CU		4	30	60	117	8.8	55	46.8	195	135	165	80	86	7*11	240*220*270	12
GDL-OCL0075-4CU		4	37	75	93.5	9.2	53.8	51.5	195	135	165	80	86	7*11	240*220*270	12.5
GDL-OCL0100-4CU		4	45	100	78.5	9.8	59.9	48.3	195	135	165	80	86	7*11	240*220*270	13
GDL-OCL0120-4CU		4	55	120	64	15	114.4	76.7	220	160	225	110	85	9*18	320*270*330	19
GDL-OCL0150-4CU		2	75	150	46.7	15.9	145	69	220	160	230	110	85	9*18	320*270*330	20
GDL-OCL0180-4CU		2	90	180	39	20.3	135.3	86.3	220	180	230	110	100	9*18	320*270*330	24.5
GDL-OCL0220-4CU		2	110	220	32	21.8	138.6	80	225	180	230	110	100	9*18	320*270*330	26
GDL-OCL0260-4CU		2	132	260	27	27.7	173.6	114.1	270	190	275	140	110	9*18	316*266*383	32.5
GDL-OCL0320-4CU	2	160	320	22	29.6	179.4	106.5	270	190	275	140	110	9*18	316*266*383	34	
GDL-OCL0400-4CU	D	2	185	400	17.5	35.5	183.1	135.6	310	200	285	170	110	11*18	396*296*443	40.5
GDL-OCL0400-4CU		2	200	400	17.5	35.5	183.1	135.6	310	200	285	170	110	11*18	396*296*443	40.5
GDL-OCL0480-4CU		2	220	480	14.5	47.7	194.8	150.2	310	225	285	170	135	11*18	396*296*443	53
GDL-OCL0480-4CU		2	250	480	14.5	47.7	194.8	150.2	310	225	285	170	135	11*18	396*296*443	53
GDL-OCL0540-4CU		2	280	540	13	49.3	208.2	145.2	310	225	290	170	135	11*18	396*296*443	54.5
GDL-OCL0600-4CU		2	315	600	11.7	52.4	197.8	139	310	225	290	170	135	11*18	396*296*443	57.5
GDL-OCL0800-4CU		2	355	800	8.75	69.4	349.4	258.7	370	260	380	190	135	13*26	466*356*528	76.5
GDL-OCL0800-4CU		2	400	800	8.75	69.4	349.4	258.7	370	260	380	190	135	13*26	466*356*528	76.5
GDL-OCL1000-4CU		2	450	1000	7	74.3	350.2	239.3	370	260	380	190	135	13*26	466*356*528	81.5
GDL-OCL1000-4CU		2	500	1000	7	74.3	350.2	239.3	370	260	380	190	135	13*26	466*356*528	81.5

System voltage: 3PH-AC690V 50Hz/3-AC690V 60Hz, Reactor insulation class: Class F, Copper																	
Model	Picture No.	Carrier frequency (\leqkHz)	VFD power (kW)	Rated current (A)	Inductance ($\mu</math>H)$	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package		
									W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)	
GDL-OCL0005-6CU	B	8	0.75	5	2540	5	20.7	12	165	115	185	60	67	7*11	240*220*270	8	
GDL-OCL0005-6CU		8	1.5	5	2540	5	20.7	12	165	115	185	60	67	7*11	240*220*270	8	
GDL-OCL0005-6CU		8	2.2	5	2540	5	20.7	12	165	115	185	60	67	7*11	240*220*270	8	
GDL-OCL0006-6CU		8	4	6	2540	5	20.7	12	165	115	185	60	67	7*11	240*220*270	8	
GDL-OCL0011-6CU		8	5.5	11	1280	5.2	35	12.5	165	115	185	60	67	7*11	240*220*270	8.5	
GDL-OCL0011-6CU		8	7.5	11	1280	5.2	35	12.5	165	115	185	60	67	7*11	240*220*270	8.5	
GDL-OCL0020-6CU		8	11	20	640	6.2	37	11.9	165	115	190	60	67	7*11	240*220*270	9.5	
GDL-OCL0020-6CU		8	15	20	640	6.2	37	11.9	165	115	190	60	67	7*11	240*220*270	9.5	
GDL-OCL0030-6CU		4	18.5	30	425	10.4	48.7	47.4	195	130	215	80	86	7*11	320*270*330	14.5	
GDL-OCL0045-6CU		C	4	22	45	283	13.2	79.2	74.5	225	150	195	110	85	9*18	320*270*330	17.5
GDL-OCL0045-6CU	4		30	45	283	13.2	79.2	74.5	225	150	195	110	85	9*18	320*270*330	17.5	
GDL-OCL0045-6CU	4		37	45	283	13.2	79.2	74.5	225	150	195	110	85	9*18	320*270*330	17.5	
GDL-OCL0060-6CU	4		45	60	212	15	131	81	225	150	225	110	85	9*18	320*270*330	19	
GDL-OCL0090-6CU	4		55	90	141	16.4	143.7	79.1	225	150	230	110	85	9*18	320*270*330	20.5	
GDL-OCL0090-6CU	2		75	90	141	16.4	143.7	79.1	225	150	230	110	85	9*18	320*270*330	20.5	
GDL-OCL0110-6CU	2		90	110	115	20.8	154.4	90.4	225	175	230	110	100	9*18	320*270*330	25	
GDL-OCL0150-6CU	2		110	150	85	22.6	169.9	94.3	225	175	230	110	100	9*18	320*270*330	26.5	
GDL-OCL0150-6CU	2		132	150	85	22.6	169.9	94.3	225	175	230	110	100	9*18	320*270*330	26.5	
GDL-OCL0200-6CU	D		2	160	200	64	32.8	162.2	112.2	270	185	275	140	110	9*18	316*266*383	37.5
GDL-OCL0200-6CU		2	185	200	64	32.8	162.2	112.2	270	185	275	140	110	9*18	316*266*383	37.5	
GDL-OCL0250-6CU		2	200	250	51	36.6	188.4	100	270	185	280	140	110	9*18	316*266*383	41.5	
GDL-OCL0250-6CU		2	220	250	51	36.6	188.4	100	270	185	280	140	110	9*18	316*266*383	41.5	
GDL-OCL0300-6CU		2	250	300	42.5	41.1	198.4	138.1	310	215	290	170	110	11*18	396*296*443	46	
GDL-OCL0300-6CU		2	280	300	42.5	41.1	198.4	138.1	310	215	280	170	110	11*18	396*296*443	46	
GDL-OCL0400-6CU		2	315	400	32	55.2	230.1	159.3	310	225	290	170	135	11*18	396*296*443	60.5	
GDL-OCL0400-6CU		2	355	400	32	55.2	230.1	159.3	310	225	290	170	135	11*18	396*296*443	60.5	
GDL-OCL0480-6CU		2	400	480	26.5	74.4	324.8	233.1	370	230	385	190	135	13*26	466*356*528	81.5	
GDL-OCL0480-6CU		2	450	480	26.5	74.4	324.8	233.1	370	230	385	190	135	13*26	466*356*528	81.5	
GDL-OCL0600-6CU		2	500	600	21.3	81.4	349.7	210.8	370	230	385	190	135	13*26	466*356*528	88.5	
GDL-OCL0600-6CU		2	560	600	21.3	81.4	349.7	210.8	370	230	385	190	135	13*26	466*356*528	88.5	
GDL-OCL0800-6CU		E	2	630	800	16	109.7	505.2	231.8	440	285	420	240	172	14*28	486*381*558	118

System voltage: 3PH-AC690V 50Hz/3-AC690V 60Hz, Reactor insulation class: Class F, Aluminium																
Model	Picture No.	Carrier frequency (<kHz)	VFD power (kW)	Rated current (A)	Inductance (μH)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
									W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-OCL0045-6AL	C	4	22	45	283	12.7	67.7	72.5	230	150	195	110	85	9*18	320*270*330	17
GDL-OCL0045-6AL		4	30	45	283	12.7	67.7	72.5	230	150	195	110	85	9*18	320*270*330	17
GDL-OCL0045-6AL		4	37	45	283	12.7	67.7	72.5	230	150	195	110	85	9*18	320*270*330	17
GDL-OCL0060-6AL		4	45	60	212	14.6	89.5	79.3	230	150	225	110	85	9*18	320*270*330	18.5
GDL-OCL0090-6AL		4	55	90	141	15.4	124.4	76	230	150	230	110	85	9*18	320*270*330	19.5
GDL-OCL0090-6AL		2	75	90	141	15.4	124.4	76	230	150	230	110	85	9*18	320*270*330	19.5
GDL-OCL0110-6AL		2	90	110	115	20.1	113.3	86	235	175	230	110	100	9*18	320*270*330	24
GDL-OCL0150-6AL		2	110	150	85	20.8	150.1	88.4	235	175	230	110	100	9*18	320*270*330	25
GDL-OCL0150-6AL		2	132	150	85	20.8	150.1	88.4	235	175	230	110	100	9*18	320*270*330	25
GDL-OCL0200-6AL		D	2	160	200	64	28.7	173.7	108.2	270	190	275	140	110	9*18	316*266*383
GDL-OCL0200-6AL	2		185	200	64	28.7	173.7	108.2	270	190	275	140	110	9*18	316*266*383	33.5
GDL-OCL0250-6AL	2		200	250	51	36.8	209.1	93.4	270	190	280	140	110	9*18	316*266*383	41.5
GDL-OCL0250-6AL	2		220	250	51	36.8	209.1	93.4	270	190	280	140	110	9*18	316*266*383	41.5
GDL-OCL0300-6AL	2		250	300	42.5	36.8	190.2	127.5	310	205	290	170	110	11*18	396*296*443	42
GDL-OCL0300-6AL	2		280	300	42.5	36.8	190.2	127.5	310	205	290	170	110	11*18	396*296*443	42
GDL-OCL0400-6AL	2		315	400	32	48.9	234	149.5	310	230	290	170	135	11*18	396*296*443	54
GDL-OCL0400-6AL	2		355	400	32	48.9	234	149.5	310	230	290	170	135	11*18	396*296*443	54
GDL-OCL0480-6AL	2		400	480	26.5	68.8	315.3	226.6	370	235	385	190	135	13*26	466*356*528	76
GDL-OCL0480-6AL	2		450	480	26.5	68.8	315.3	226.6	370	235	385	190	135	13*26	466*356*528	76
GDL-OCL0600-6AL	E	2	500	600	21.3	71.1	395.5	203	370	235	385	190	135	13*26	466*356*528	78
GDL-OCL0600-6AL		2	560	600	21.3	71.1	395.5	203	370	235	385	190	135	13*26	466*356*528	78
GDL-OCL0800-6AL	E	2	630	800	16	100.5	455.2	227.3	440	300	420	240	172	14*28	486*381*558	108.5

dv/dt decrement filters

- Application circuit:** VFD output side, to suppresses voltage spikes, and reduce the dv/dt transient voltage reflected by the long cable traveling waves, so as to reduce motor eddy current loss and noise and protect motor insulation. Mainly used in the scenarios where power supply voltage is too high, old motors need innovation, non-variable frequency motor insulation strength is low, braking happens frequently, and transmission uses longer cables.



Performance

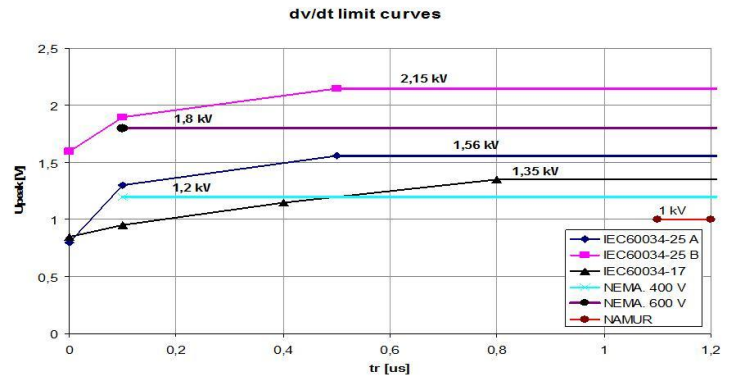
Rated voltage	3PH-AC400V/AC690V ,50HZ/60Hz
Voltage spike value Up	Able to reduce voltage spikes to 1000V (400V system) or 1800V (690V system) at most
dv/dt value	≤ 300V/uS
Allowed transmission distance	≤ 450m (≤ 230m for shielded cables)
Insulation class	F
Rated noise	≤ 75 d B
Electric strength	AC3000V/AC4200V 50Hz 1min Leakage current ≤ 5m A No flying arcs or breakdowns
Working environment temperature	-25°C -55°C
Cooling method	Natural cooling
Standards	Compliant with the German chemical industry NAMUR standards; Compliant with RoHS standards; Compliant with CE certification

Standards

International standards:
IEC 60034-17
IEC 60034-25

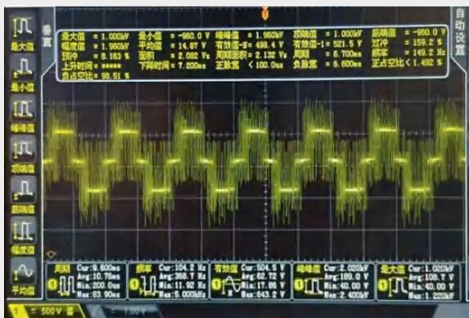
National standards and regulations:
United States: NEMA MG-1

Special industry requirements:
German chemical industry: NAMUR

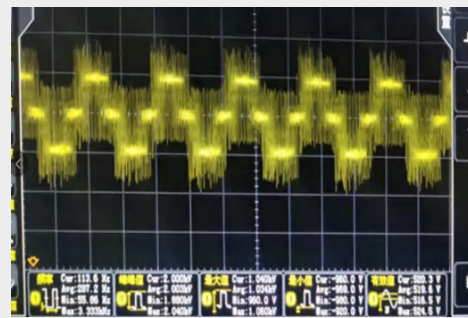


Filter effect

3PH-AC690V system **Upeak values** before and after adding a **dv/dt** decrement filter

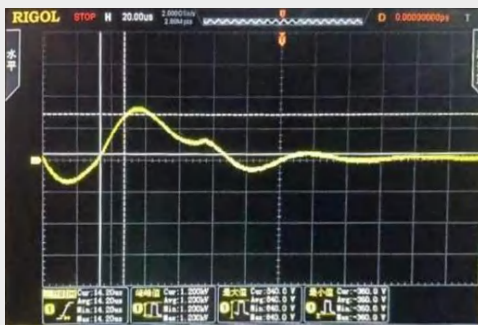


Initial Upeak value: 2340V

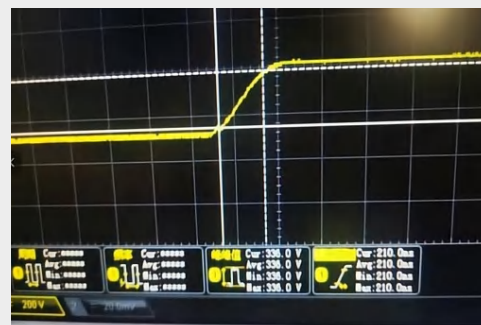


Filtered Upeak value: 1760V

3PH-AC690V system **dv/dt values** before and after adding a **dv/dt** decrement filter



Initial dv/dt value: 1600V/us

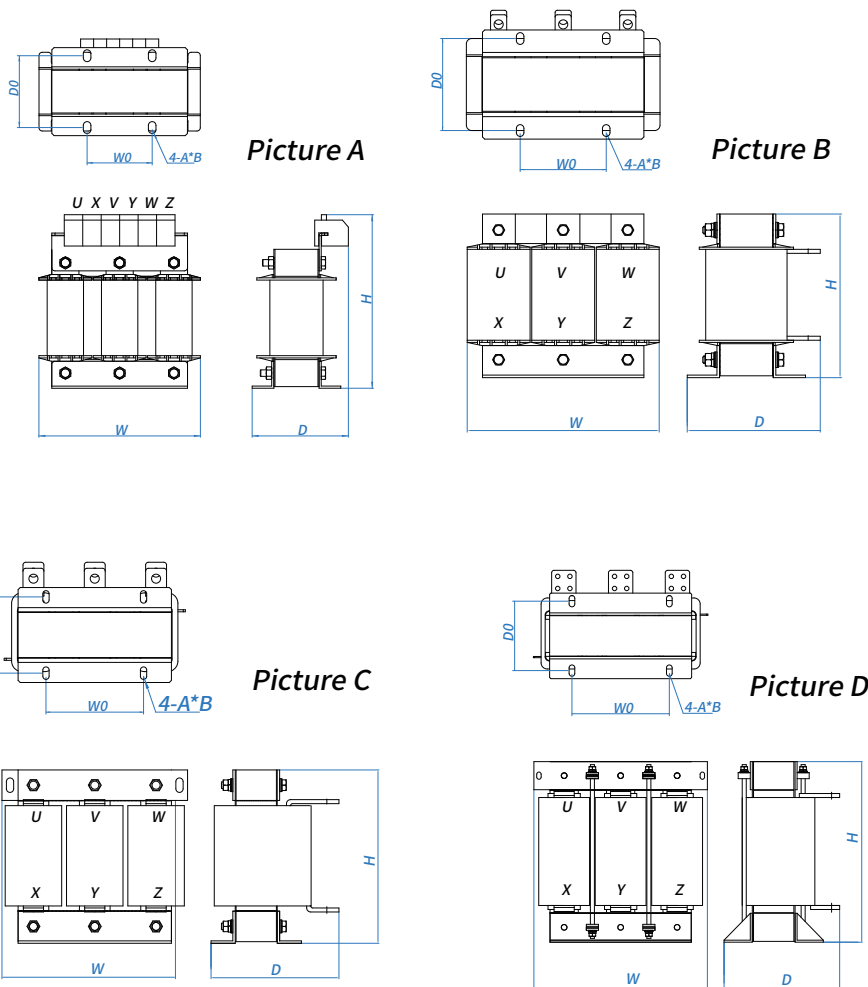


Filtered dv/dt value: 84.5V/us

■ Comparison between dv/dt decrement filter parameters and traditional LC type dv/dt filter parameters

Project/Solution	LC type	dv/dt decrement type
Design principle	To slower the voltage rise rate	To slower the voltage rise rate and reduce voltage spikes
dv/dt value	Obvious effect	Obvious effect
Voltage spike U _{peak}	Invalid	Obvious effect, compliant with German chemical industry NAMUR standards
Stability	Average; Capacitors are susceptible to damaged	Very stable

■ Dimensional and technical parameters



Note:

Among the markings on the products, U, V, and W indicate three-phase input terminals, while X, Y, and Z indicates three-phase output terminals. In the catalogue, W_{max} , D_{max} , and H_{max} represent the maximum installation dimensions.

■ For dv/dt decrement filters

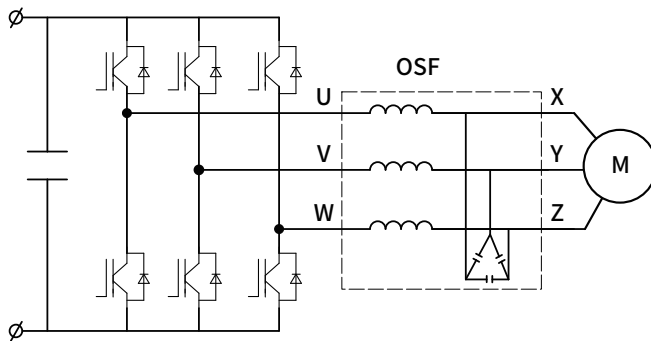
System voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, Reactor insulation class: Class F, Copper																
Model	Picture No.	VFD power (kW)	Carrier frequency (<kHz)	Rated current (A)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package		
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)	
GDL-DUL0005-4CU	A	0.75	8	5	5	17.8	7.2	165	105	175	60	67	7*11	240*220*270	8	
GDL-DUL0005-4CU		1.5	8	5	5	17.8	7.2	165	105	175	60	67	7*11	240*220*270	8	
GDL-DUL0005-4CU		2.2	8	5	5	17.8	7.2	165	105	175	60	67	7*11	240*220*270	8	
GDL-DUL0010-4CU		4	8	10	9	26.5	10.6	195	125	200	80	87	7*11	240*220*270	12	
GDL-DUL0014-4CU		5.5	8	14	9.1	24.3	11.4	195	125	200	80	87	7*11	240*220*270	12	
GDL-DUL0020-4CU		7.5	8	20	9.1	46.5	11.3	195	125	200	80	87	7*11	240*220*270	12	
GDL-DUL0025-4CU		11	8	25	9.2	45.7	12	195	125	200	80	87	7*11	240*220*270	12.5	
GDL-DUL0032-4CU		15	4	32	9.4	47.6	12	195	125	200	80	87	7*11	240*220*270	12.5	
GDL-DUL0040-4CU	B	18.5	4	40	13	78.5	12.6	225	150	195	110	85	9*18	320*270*330	17	
GDL-DUL0045-4CU		22	4	45	13	78.5	12.6	225	150	195	110	85	9*18	320*270*330	17	
GDL-DUL0060-4CU		30	4	60	15	105	21.1	220	150	225	110	85	9*18	320*270*330	19	
GDL-DUL0075-4CU		37	4	75	15	108.3	19.8	220	150	225	110	85	9*18	320*270*330	19	
GDL-DUL0100-4CU		45	4	100	16	115.2	18.8	225	150	225	110	85	9*18	320*270*330	20	
GDL-DUL0120-4CU		55	4	120	20	123.6	23.9	220	175	225	110	100	9*18	320*270*330	24	
GDL-DUL0150-4CU		75	2	150	22	145.7	21.8	225	175	225	110	100	9*18	320*270*330	26	
GDL-DUL0180-4CU	C	90	2	180	28	170.9	28	270	185	275	140	110	9*18	316*266*383	32.5	
GDL-DUL0220-4CU		110	2	220	30	210.4	26.5	270	185	275	140	110	9*18	316*266*383	34.5	
GDL-DUL0260-4CU		132	2	260	36	215.6	30.5	310	190	285	170	110	11*18	396*296*443	41	
GDL-DUL0320-4CU		160	2	320	40	217.9	28.3	310	190	290	170	110	11*18	396*296*443	45	
GDL-DUL0400-4CU		185	2	400	50	249.5	36.1	310	225	285	170	135	11*18	396*296*443	55	
GDL-DUL0400-4CU		200	2	400	50	249.5	36.1	310	225	285	170	135	11*18	396*296*443	55	
GDL-DUL0480-4CU		220	2	480	69	378.7	55.3	370	230	380	190	135	13*26	466*356*528	76	
GDL-DUL0480-4CU		250	2	480	69	378.7	55.3	370	230	380	190	135	13*26	466*356*528	76	
GDL-DUL0540-4CU		280	2	540	75	380.5	52.3	370	230	380	190	135	13*26	466*356*528	82	
GDL-DUL0600-4CU		315	2	600	75	391.2	52.3	370	230	380	190	135	13*26	466*356*528	82	
GDL-DUL0800-4CU		D	355	2	800	104	420	66.8	440	285	410	240	172	14*28	486*381*558	112
GDL-DUL0800-4CU			400	2	800	104	420	66.8	440	285	410	240	172	14*28	486*381*558	112
GDL-DUL1000-4CU	450		2	1000	112	465.5	61.9	440	285	415	240	172	14*28	486*381*558	120	
GDL-DUL1000-4CU	500		2	1000	112	465.5	61.9	440	285	415	240	172	14*28	486*381*558	120	

System voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, Reactor insulation class: Class F, Aluminium															
Model	Picture No.	VFD power (kW)	Carrier frequency (<kHz)	Rated current (A)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-DUL0040-4AL	B	18.5	4	40	13	79.6	12.6	230	150	195	110	85	9*18	320*270*330	17
GDL-DUL0045-4AL		22	4	45	13	79.6	12.6	230	150	195	110	85	9*18	320*270*330	17
GDL-DUL0060-4AL		30	4	60	15	109.4	21.1	225	150	225	110	85	9*18	320*270*330	19
GDL-DUL0075-4AL		37	4	75	15	113.7	19.8	225	150	225	110	85	9*18	320*270*330	19
GDL-DUL0100-4AL		45	4	100	16	122.4	18.8	230	150	225	110	85	9*18	320*270*330	20
GDL-DUL0120-4AL		55	4	120	20	127.9	23.9	225	175	230	110	100	9*18	320*270*330	24
GDL-DUL0150-4AL		75	2	150	22	147.9	21.8	230	175	225	110	100	9*18	320*270*330	26
GDL-DUL0180-4AL	C	90	2	180	28	189.9	28	270	190	275	140	110	9*18	316*266*383	32.5
GDL-DUL0220-4AL		110	2	220	30	212.2	26.5	270	190	275	140	110	9*18	316*266*383	34.5
GDL-DUL0260-4AL		132	2	260	36	222.4	30.5	310	195	285	170	110	11*18	396*296*443	41
GDL-DUL0320-4AL		160	2	320	40	218.5	28.3	310	195	290	170	110	11*18	396*296*443	45
GDL-DUL0400-4AL		185	2	400	50	258.7	36.1	310	230	285	170	135	11*18	396*296*443	55
GDL-DUL0400-4AL		200	2	400	50	258.7	36.1	310	230	285	170	135	11*18	396*296*443	55
GDL-DUL0480-4AL		220	2	480	69	391.8	55.3	370	235	380	190	135	13*26	466*356*528	76
GDL-DUL0480-4AL		250	2	480	69	391.8	55.3	370	235	380	190	135	13*26	466*356*528	76
GDL-DUL0540-4AL		280	2	540	75	377.2	52.3	370	235	380	190	135	13*26	466*356*528	82
GDL-DUL0600-4AL		315	2	600	75	377.2	52.3	370	235	380	190	135	13*26	466*356*528	82
GDL-DUL0800-4AL	D	355	2	800	104	430.9	66.8	440	300	410	240	172	14*28	486*381*558	112
GDL-DUL0800-4AL		400	2	800	104	430.9	66.8	440	300	410	240	172	14*28	486*381*558	112
GDL-DUL1000-4AL		450	2	1000	112	476.2	61.9	440	300	415	240	172	14*28	486*381*558	120
GDL-DUL1000-4AL		500	2	1000	112	476.2	61.9	440	300	415	240	172	14*28	486*381*558	120

System voltage: 3PH-AC690V 50Hz/3-AC690V 60Hz, Reactor insulation class: Class F, Copper																
Model	Picture No.	VFD power (kW)	Carrier frequency (<kHz)	Rated current (A)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package		
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)	
GDL-DUL0005-6CU	A	0.75	8	5	9	29.7	9.6	195	135	205	80	87	7*11	240*220*270	12	
GDL-DUL0005-6CU		1.5	8	5	9	29.7	9.6	195	135	205	80	87	7*11	240*220*270	12	
GDL-DUL0005-6CU		2.2	8	5	9	29.7	9.6	195	135	205	80	87	7*11	240*220*270	12	
GDL-DUL0010-6CU		4	8	10	9	29	11	195	135	205	80	87	7*11	240*220*270	12	
GDL-DUL0010-6CU		5.5	8	10	9	29	11	195	135	205	80	87	7*11	240*220*270	12	
GDL-DUL0015-6CU		7.5	8	15	9	29	11	195	135	205	80	87	7*11	240*220*270	12	
GDL-DUL0020-6CU		11	8	20	9	37.6	10.8	195	135	205	80	87	7*11	240*220*270	12	
GDL-DUL0025-6CU		15	8	25	9.1	37.6	10.8	195	135	205	80	87	7*11	240*220*270	12	
GDL-DUL0030-6CU		18.5	4	30	9.4	62.2	18.4	195	135	210	80	87	7*11	240*220*270	12.5	
GDL-DUL0030-6CU		22	4	30	9.4	62.2	18.4	195	135	210	80	87	7*11	240*220*270	12.5	
GDL-DUL0045-6CU	B	30	4	45	15.6	96.7	21.2	225	160	195	110	95	9*18	320*270*330	19.5	
GDL-DUL0045-6CU		37	4	45	15.6	96.7	21.2	225	160	195	110	95	9*18	320*270*330	19.5	
GDL-DUL0065-6CU		45	4	65	18.8	112.6	20.5	225	160	230	110	95	9*18	320*270*330	23	
GDL-DUL0065-6CU		55	4	65	18.8	112.6	20.5	225	160	230	110	95	9*18	320*270*330	23	
GDL-DUL0090-6CU		75	2	90	20.2	124.7	21.1	225	160	230	110	95	9*18	320*270*330	24.5	
GDL-DUL0110-6CU	C	90	2	110	24.6	154.5	26	270	175	240	140	105	9*18	316*266*383	29	
GDL-DUL0150-6CU		110	2	150	32.2	201.4	27.6	270	185	275	140	115	9*18	316*266*383	36.5	
GDL-DUL0150-6CU		132	2	150	32.2	201.4	27.6	270	185	275	140	115	9*18	316*266*383	36.5	
GDL-DUL0220-6CU		160	2	220	44.8	225.8	35	310	200	290	170	125	11*18	396*296*443	50	
GDL-DUL0220-6CU		185	2	220	44.8	225.8	35	310	200	290	170	125	11*18	396*296*443	50	
GDL-DUL0220-6CU		200	2	220	44.8	225.8	35	310	200	290	170	125	11*18	396*296*443	50	
GDL-DUL0260-6CU		220	2	260	47.6	244.1	32.4	310	205	290	170	125	11*18	396*296*443	52.5	
GDL-DUL0320-6CU		250	2	320	53.4	253.7	34.9	310	210	290	170	130	11*18	396*296*443	58.5	
GDL-DUL0320-6CU		280	2	320	53.4	253.7	34.9	310	210	290	170	130	11*18	396*296*443	58.5	
GDL-DUL0400-6CU		315	2	400	74.4	433	44.7	370	230	385	190	135	13*26	466*356*528	81.5	
GDL-DUL0400-6CU		355	2	400	74.4	433	44.7	370	230	385	190	135	13*26	466*356*528	81.5	
GDL-DUL0480-6CU		400	2	480	76.7	425.2	55.2	370	230	385	190	135	13*26	466*356*528	84	
GDL-DUL0480-6CU		450	2	480	76.7	425.2	55.2	370	230	385	190	135	13*26	466*356*528	84	
GDL-DUL0600-6CU		D	500	2	600	87.3	443.8	64.2	370	240	385	190	145	13*26	466*356*528	94.5
GDL-DUL0600-6CU			560	2	600	87.3	443.8	64.2	370	240	385	190	145	13*26	466*356*528	94.5
GDL-DUL0800-6CU	630		2	800	112.3	493.2	79.9	440	285	415	240	172	14*28	486*381*558	120.5	

Sine filters

- **Application circuit:** VFD output side, to suppress and absorb the high-order harmonic current derived from the ripple current of the switching frequency, with the corrected wave shape almost like sine wave, greatly extending the output cable length, so as to reduce motor eddy current loss and noise and protect motor insulation.



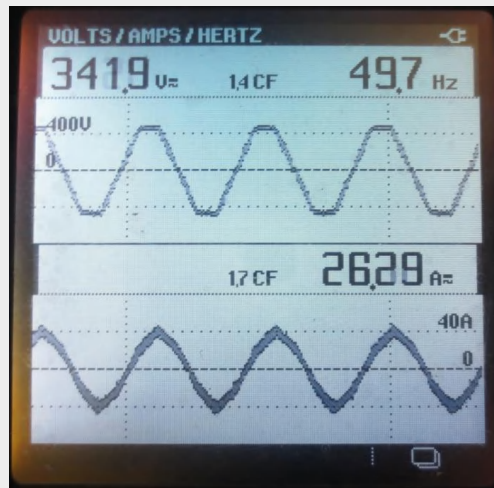
■ Performance

Rated voltage	3PH-AC400V /690V, 50Hz/60Hz
Insulation class	F
Rated noise	≤ 75 d B
Electric strength	AC3000V/AC4200V 50Hz 1min Leakage current ≤ 5m A
Working environment temperature	-25°C -55°C
Cooling method	Natural cooling
Standards	GB/T 1094.6-2011: Reactors, IEC 289:1987: Reactors; GB/T 19212.1-2023: General Requirements and Tests; Compliant with RoHS standards; Compliant with CE certification

■ Comparison of voltage and current waveforms before and after adding a sine filter

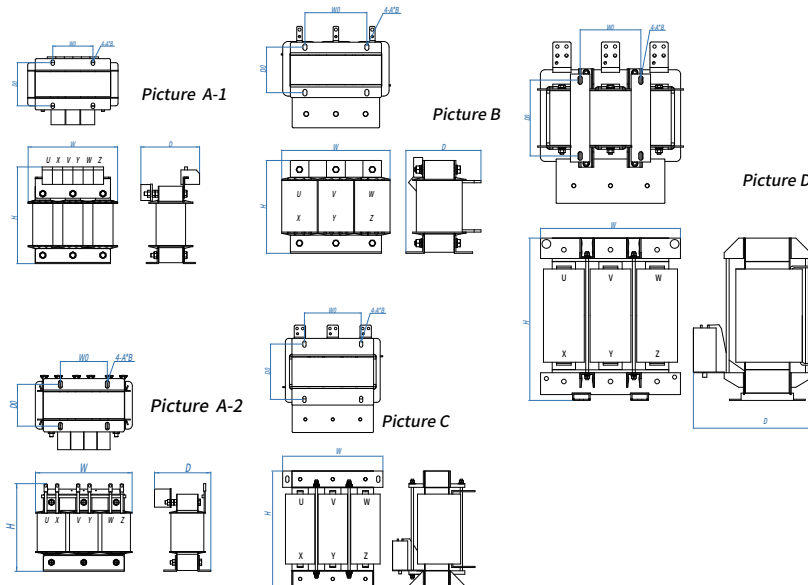


Voltage and current waveform before adding a sine filter



Voltage and current waveform after adding a sine filter

■ Dimensional and technical parameters



Note:
Among the markings on the products, U, V, and W indicate three-phase input terminals, while X, Y, and Z indicate three-phase output terminals
In the catalogue, Wmax, Dmax, and Hmax represent the maximum installation dimensions

■ For sine filters

System rated voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz, THDu/i ≤ 5%, Output cable length up to 1000m (500m for shielded cables), Aluminium

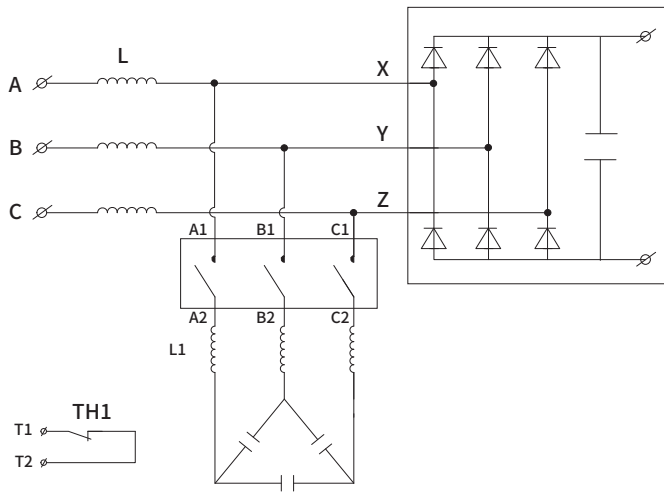
Model	Picture No.	Carrier frequency (\simkHz)	VFD power (kW)	Rated current (A)	Weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-OSF0005-4AL	A-1	8	0.75	5	5.1	40.11	16.6	165	130	185	60	66.5	7*11	320*270*330	9.5
GDL-OSF0005-4AL		8	1.5	5	5.1	40.11	16.6	165	130	185	60	66.5	7*11	320*270*330	9.5
GDL-OSF0005-4AL		8	2.2	5	5.1	40.11	16.6	165	130	185	60	66.5	7*11	320*270*330	9.5

System rated voltage: 3PH-AC400V 50Hz/3-AC480V 60Hz,THDu/i ≤ 5%, Output cable length up to1000m (500m for shielded cables), Aluminium															
Model	Picture No.	Carrier frequency (<kHz)	VFD power (kW)	Rated current (A)	Weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)						Single unit package	
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-OSF0010-4AL	A-1	8	4	10	6.2	70.65	20.2	195	125	205	80	64	7*11	316*266*383	11
GDL-OSF0014-4AL		8	5.5	14	8.8	52.48	37.53	195	145	225	80	86	7*11	316*266*383	13.5
GDL-OSF0020-4AL		8	7.5	20	8.8	88.64	36.68	195	150	225	80	86	7*11	316*266*383	13.5
GDL-OSF0025-4AL	A-2	8	11	25	13.5	85.46	57.29	245	165	290	110	83	9*18	396*296*443	18.5
GDL-OSF0032-4AL		4	15	32	13.4	124.3	63.96	245	165	290	110	83	9*18	396*296*443	18.5
GDL-OSF0040-4AL		4	18.5	40	16.3	146.16	73.92	245	170	340	110	83	9*18	466*356*528	23.5
GDL-OSF0045-4AL		4	22	45	20	171.6	84.26	245	190	340	110	98	9*18	466*356*528	27
GDL-OSF0060-4AL	B	4	30	60	31.6	230.41	101.72	270	285	275	140	120	9*18	396*296*443	37
GDL-OSF0075-4AL		4	37	75	41.1	223.37	119.68	310	290	285	170	125	11*18	466*356*528	48.5
GDL-OSF0095-4AL		4	45	95	43	243.11	122.58	310	290	290	170	125	11*18	466*356*528	50
GDL-OSF0120-4AL	C	4	55	120	62.7	389.83	195.66	370	305	380	190	130	13*26	466*356*528	70
GDL-OSF0150-4AL		2	75	150	94.6	444.73	274.47	440	330	410	240	172	14*28	516*456*568	104.8
GDL-OSF0180-4AL		2	90	180	106.5	467.51	268.77	440	355	410	240	182	14*28	516*456*568	116.8
GDL-OSF0220-4AL		2	110	220	125.7	504.71	313.83	440	385	410	240	202	14*28	516*456*568	135.6
GDL-OSF0260-4AL		2	132	260	137.3	664	310.62	440	370	515	240	187	14*28	536*516*678	148.4
GDL-OSF0320-4AL		2	160	320	165	784.93	358.06	440	390	515	240	212	14*28	536*516*678	175.9
GDL-OSF0400-4AL		2	185	400	155.5	1287.52	339.69	440	440	520	240	202	14*28	536*516*678	166.6
GDL-OSF0400-4AL		2	200	400	155.5	1287.52	339.69	440	440	520	240	202	14*28	536*516*678	166.6
GDL-OSF0480-4AL		2	220	480	161.6	1517.96	358.09	450	490	520	250	244	14*28	576*516*698	172.9
GDL-OSF0480-4AL		2	250	480	161.6	1517.96	358.09	450	490	520	250	244	14*28	576*516*698	172.9
GDL-OSF0600-4AL		D	2	280	600	218.8	1470.42	427.44	490	500	545	200	230	14*28	576*576*828
GDL-OSF0600-4AL	2		315	600	218.8	1470.42	427.44	490	500	545	200	230	14*28	576*576*828	230.7
GDL-OSF0800-4AL	2		355	800	292.3	1697.85	542.87	490	550	660	200	250	14*28	666*686*858	305.3
GDL-OSF0800-4AL	2		400	800	292.3	1697.85	542.87	490	550	660	200	250	14*28	666*686*858	305.3
GDL-OSF1000-4AL	D+Split capacitor	2	450	1000	337.4	1871.18	602.89	550	440	685	220	240	14*28	726*636*848	355
								415	240	198	393	130	7*11		
GDL-OSF1000-4AL		2	500	1000	337.4	1871.18	602.89	550	440	685	220	240	14*28	726*636*848	355
								415	240	198	393	130	7*11		

System rated voltage: 3PH-AC690V 50Hz/3-AC690V 60Hz,THDu/i ≤ 5%, Output cable length up to1000m (500m for shielded cables), Copper															
Model	Picture No.	Carrier frequency (<kHz)	VFD power (kW)	Rated current (A)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)					Single unit package		
								W max	D max	H max	W0	D0	A*B	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-OSF0005-6CU	A-1	8	0.75	5	5.4	45.1	33.2	190	160	230	80	67	7*11	320*270*330	9.5
GDL-OSF0005-6CU		8	1.5	5	5.4	45.1	33.2	190	160	230	80	67	7*11	320*270*330	9.5
GDL-OSF0005-6CU		8	2.2	5	5.4	45.1	33.2	190	160	230	80	67	7*11	320*270*330	9.5
GDL-OSF0010-6CU		8	4	10	7	56.4	33.5	190	160	230	80	67	7*11	320*270*330	11
GDL-OSF0010-6CU		8	5.5	10	7	56.4	33.5	190	160	230	80	67	7*11	320*270*330	11
GDL-OSF0020-6CU	A-2	8	7.5	20	25.5	97.41	48.3	240	180	280	110	98	9*18	396*296*443	30.5
GDL-OSF0020-6CU		8	11	20	25.5	97.41	48.3	240	180	280	110	98	9*18	396*296*443	30.5
GDL-OSF0020-6CU		8	15	20	25.5	97.41	48.3	240	180	280	110	98	9*18	396*296*443	30.5
GDL-OSF0030-6CU	B	4	18.5	30	32.8	144.29	70	270	200	290	140	118	9*18	396*296*443	38
GDL-OSF0030-6CU		4	22	30	32.8	144.29	70	270	200	290	140	118	9*18	396*296*443	38
GDL-OSF0045-6CU		4	30	45	58.8	156.27	123.1	310	270	370	170	145	11*18	466*356*528	66
GDL-OSF0045-6CU		4	37	45	58.8	156.27	123.1	310	270	370	170	145	11*18	466*356*528	66
GDL-OSF0065-6CU		4	45	65	58.7	275.72	129.3	310	280	370	170	145	11*18	466*356*528	66
GDL-OSF0065-6CU		4	55	65	58.7	275.72	129.3	310	280	370	170	145	11*18	466*356*528	66
GDL-OSF0090-6CU	C	2	75	90	98.9	373.81	246.4	370	335	380	190	170	13*26	486*381*558	107
GDL-OSF0110-6CU		2	90	110	121.8	389.45	296.7	440	345	410	240	192	14*28	516*456*568	132
GDL-OSF0150-6CU		2	110	150	143.3	573.41	315	440	375	410	240	212	14*28	516*456*568	153.5
GDL-OSF0150-6CU		2	132	150	143.3	573.41	315	440	375	410	240	212	14*28	516*456*568	153.5
GDL-OSF0200-6CU		2	160	200	179.8	687.37	357	440	370	515	240	212	14*28	536*516*678	191
GDL-OSF0200-6CU		2	185	200	179.8	687.37	357	440	370	515	240	212	14*28	536*516*678	191
GDL-OSF0250-6CU		2	200	250	198.4	925.47	350	440	400	515	240	222	14*28	536*516*678	209.5
GDL-OSF0250-6CU		2	220	250	198.4	925.47	350	440	400	515	240	222	14*28	536*516*678	209.5
GDL-OSF0300-6CU	D	2	250	300	232	846.39	372.2	490	420	540	200	220	14*28	576*516*698	244
GDL-OSF0300-6CU		2	280	300	232	846.39	372.2	490	420	540	200	220	14*28	576*516*698	244
GDL-OSF0400-6CU		2	315	400	285.4	1467.14	428.4	490	445	655	200	220	14*28	576*576*828	298.5
GDL-OSF0400-6CU		2	355	400	285.4	1467.14	428.4	490	445	655	200	220	14*28	576*576*828	298.5
GDL-OSF0480-6CU		2	400	480	354.6	1335.19	472.2	550	455	675	220	220	14*28	576*576*828	367.5
GDL-OSF0480-6CU		2	450	480	354.6	1335.19	472.2	550	455	675	220	220	14*28	576*576*828	367.5
GDL-OSF0600-6CU		2	500	600	385.3	1852.17	463.7	550	505	680	220	225	14*28	576*576*828	398.5
GDL-OSF0600-6CU		2	560	600	385.3	1852.17	463.7	550	505	680	220	225	14*28	576*576*828	398.5
GDL-OSF0800-6CU		2	630	800	475.4	2139.99	554.5	610	610	705	240	230	14*28	686*666*858	490.5

Passive harmonic filters

- **Application circuit:** Input side of a six-pulse rectification device (such as VFD, DC speed regulator, and electric car charging station centralized rectification cabinet), to reduce the current distortion rate and harmonic content, and improve the device power factor.



Remarks: A1A2,B1B2,C1C2, is used for connecting external contactor, factory default short connection.
T1,T2: 150°C normally closed temperature control terminals.

■ Performance

Rated voltage	3PH-AC400V/690V, 50Hz
Insulation class	F
Rated noise	≤ 75d B
Electric strength	AC3000V/AC4200V 50Hz 1min Leakage current ≤ 5m A
Power factor	Increased from 0.8 to 0.95–0.98
Current distortion rate	≤ 5%
Working environment temperature	≤ -25°C -40°C
Cooling method	Natural cooling. External heat dissipation is required when the ambient temperature is above 40°C .
Standard	RoHS compliant; CE compliant

■ Test results

The following shows the test results before and after adding the passive harmonic filter to the 30kW VFD input side



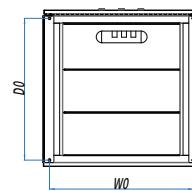
Voltage and current waveform and current distortion rate THDi before the adding



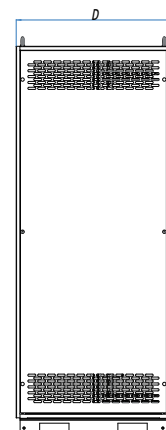
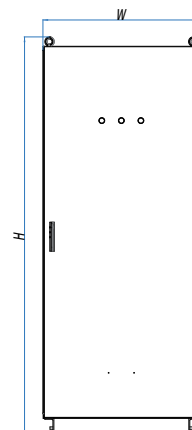
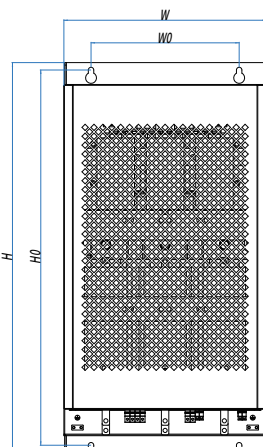
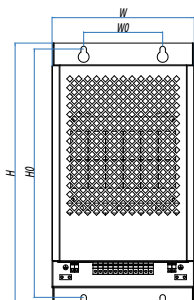
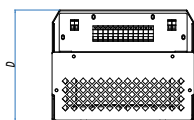
Voltage and current waveform and current distortion rate THDi after the adding

■ Dimensional and technical parameters

Picture B



Picture A



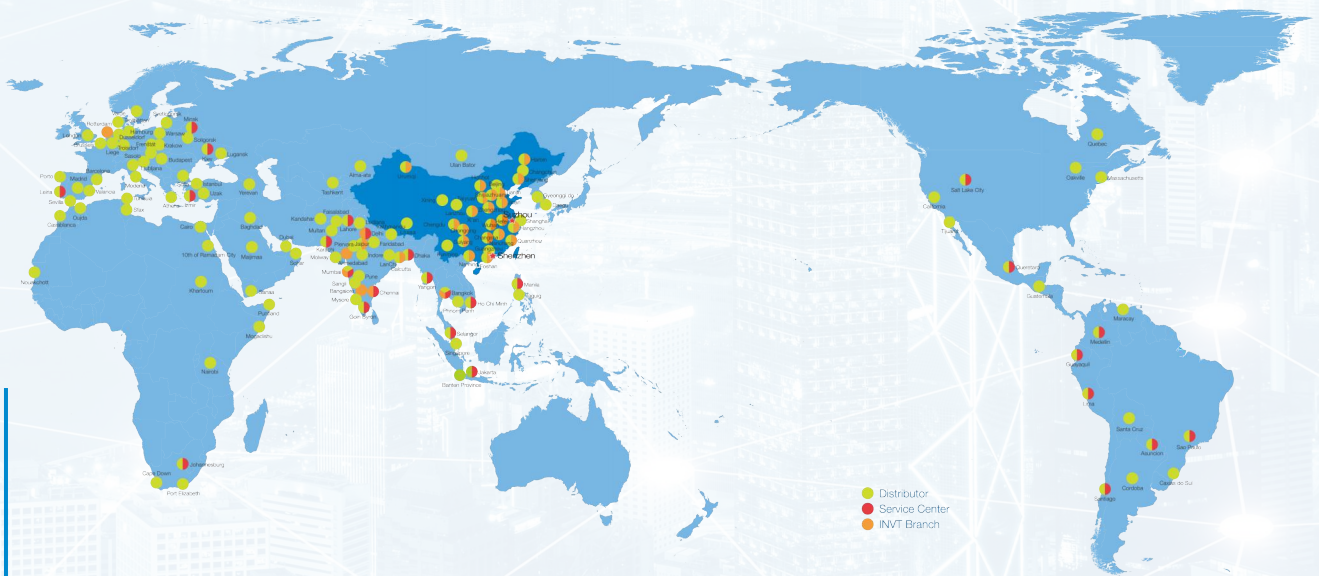
Note:
Among the markings on the products, A, B, and C indicate three-phase input terminals, while X, Y, and Z indicate three-phase output terminals
In the catalogue, Wmax, Dmax, and Hmax represent the maximum installation dimensions

400V 50Hz 6-pulse rectification device (such as VFD, DC speed regulator, and electric car charging station centralized rectification cabinet without rectifier bridge control) harmonic content reduced to within 5%, Aluminum																
Model	Picture No.	Rated current (A)	VFD power (kW)	Branch current (A)	Heat generation (W)	Min. air volume in cabinet (m ³ /min)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)					Single unit package	
										W max	D max	H max	W0	D0	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-H0006-4AL	A	6	0.75	2.5	151	0.8	19	95.27	55.23	220	225	410	160	373	516*366*368	26.5
GDL-H0006-4AL		6	1.5	2.5	151	0.8	19	95.27	55.23	220	225	410	160	373	516*366*368	26.5
GDL-H0006-4AL		6	2.2	2.5	151	0.8	19	95.27	55.23	220	225	410	160	373	516*366*368	26.5
GDL-H0014-4AL		14	4	5	183	0.8	23	132.3	50.29	220	225	410	160	373	516*366*368	30.5
GDL-H0020-4AL		20	5.5	8	222	1.1	30	159.01	62.68	300	260	540	160	503	646*416*398	39
GDL-H0025-4AL		25	7.5	8	222	1.1	30	159.01	62.68	300	260	540	160	503	646*416*398	39
GDL-H0032-4AL		32	11	12	342	1.6	41	248.04	94.02	300	260	540	160	503	646*416*398	50
GDL-H0040-4AL		40	15	14	335	1.6	50	237.57	97.5	310	315	695	190	655	816*416*443	60
GDL-H0047-4AL		47	18.5	22	460	2.1	64	328.07	131.61	310	315	695	190	655	816*416*443	74
GDL-H0056-4AL		56	22	22	460	2.1	64	328.07	131.61	310	315	695	190	655	816*416*443	74
GDL-H0070-4AL	B	70	30	29.1	576	2.7	104	366.24	209.46	420	340	800	300	760	876*496*488	114.5
GDL-H0080-4AL		80	37	34.9	732	3.4	113	495.7	235.8	420	340	800	300	760	876*496*488	123.5
GDL-H0100-4AL		100	45	43	727	3.4	123	488.3	238.61	420	340	800	300	760	876*496*488	133.5
GDL-H0130-4AL		130	55	50.6	841	3.9	133	585.39	255.56	420	340	800	300	760	876*496*488	143.5
GDL-H0160-4AL		160	75	70.2	1122	5.2	181	774.78	347.26	465	430	960	350	920	1066*566*588	193.5
GDL-H0190-4AL		190	90	84.5	1178	5.4	205	800.29	377.74	465	430	960	350	920	1066*566*588	217.5
GDL-H0225-4AL		225	110	101.2	1350	6.2	223	935.41	414.18	465	430	960	350	920	1066*566*588	235.5
GDL-H0265-4AL		265	132	124.1	1708	7.9	287	1211.86	496.52	490	425	1200	375	1160	1266*566*588	300.5
GDL-H0320-4AL		320	160	150.4	1881	8.7	300	1365.74	515.14	490	425	1200	375	1160	1266*566*588	313.5
GDL-H0400-4AL		Cabinet	400	185	188.6	2148	9.9	384	1600.57	547.16	800	800	2000	/	/	916*866*2188
GDL-H0400-4AL	400		200	188.6	2148	9.9	384	1600.57	547.16	800	800	2000	/	/	916*866*2188	404
GDL-H0485-4AL	485		220	226.8	2273	10.5	417	1672.41	600.55	800	800	2000	/	/	916*866*2188	437
GDL-H0485-4AL	485		250	226.8	2273	10.5	417	1672.41	600.55	800	800	2000	/	/	916*866*2188	437
GDL-H0545-4AL	545		280	286.5	2776	12.8	500	2072.8	703.21	800	800	2000	/	/	916*866*2188	520
GDL-H0610-4AL	610		315	286.5	2776	12.8	500	2072.8	703.21	800	800	2000	/	/	916*866*2188	520
GDL-H0800-4AL	800		355	352	3070	14.2	600	2349.77	831.34	800	800	2200	/	/	916*866*2388	621
GDL-H0800-4AL	800		400	352	3070	14.2	600	2349.77	831.34	800	800	2200	/	/	916*866*2388	621
GDL-H1000-4AL	1000		450	477.42	3927	18.2	720	3058.96	868.25	800	800	2200	/	/	916*866*2388	741
GDL-H1000-4AL	1000		500	477.42	3927	18.2	720	3058.96	868.25	800	800	2200	/	/	916*866*2388	741

■ For passive harmonic filters

690V 50Hz 6-pulse rectification device (such as VFD, DC speed regulator, and electric car charging station centralized rectification cabinet without rectifier bridge control) harmonic content reduced to within 5%, Aluminum																
Model	Picture No.	Rated current (A)	VFD power (kW)	Branch current (A)	Heat generation (W)	Min. air volume in cabinet (m ³ /min)	Net weight (kg)	Line loss (W)	Iron loss (W)	Dimensions (mm)					Single unit package	
										W max	D max	H max	W0	D0	Dimensions (W*D*H) (mm)	Gross weight (kg)
GDL-H0005-6AL	A	5	0.75	2.41	178	0.8	35	105.96	71.65	300	260	540	160	503	646*416*398	44
GDL-H0005-6AL		5	1.5	2.41	178	0.8	35	105.96	71.65	300	260	540	160	503	646*416*398	44
GDL-H0007-6AL		7	2.2	2.41	178	0.8	35	105.96	71.65	300	260	540	160	503	646*416*398	44
GDL-H0010-6AL		10	4	4.83	178	0.8	35	154.62	101.11	300	260	540	160	503	646*416*398	44
GDL-H0010-6AL		10	5.5	4.83	256	1.2	45	154.62	101.11	300	260	540	160	503	646*416*398	54
GDL-H0016-6AL		16	7.5	7.24	318	1.5	58	203.26	114.98	310	315	695	190	655	816*416*443	68
GDL-H0016-6AL		16	11	7.24	318	1.5	58	203.26	114.98	310	315	695	190	655	816*416*443	68
GDL-H0020-6AL		20	15	9.65	401	1.9	90	238.38	162.74	420	340	800	300	760	876*496*488	100.5
GDL-H0035-6AL		35	18.5	14.48	533	2.4	95	280.58	209.55	420	340	800	300	760	876*496*488	105.5
GDL-H0035-6AL		35	22	14.48	533	2.4	95	280.58	209.55	420	340	800	300	760	876*496*488	105.5
GDL-H0047-6AL	B	47	30	21.72	789	3.1	125	369.04	246.33	420	340	800	300	760	876*496*488	135.5
GDL-H0047-6AL		47	37	21.72	789	3.1	125	369.04	246.33	420	340	800	300	760	876*496*488	135.5
GDL-H0060-6AL		60	45	28.96	950	3.9	155	470.66	324.07	465	430	960	350	920	1066*566*588	167.5
GDL-H0090-6AL		90	55	41.41	1084	5.4	185	775.9	321.08	490	425	1200	375	1160	1266*566*588	198.5
GDL-H0090-6AL		90	75	41.41	1084	5.4	185	775.9	321.08	490	425	1200	375	1160	1266*566*588	198.5
GDL-H0110-6AL		110	90	50.62	1241	5.8	205	861.38	317.91	490	425	1200	375	1160	1266*566*588	218.5
GDL-H0150-6AL		150	110	69	1492	8.2	230	1138.35	320.85	490	425	1200	375	1160	1266*566*588	243.5
GDL-H0150-6AL		150	132	69	1492	8.2	230	1138.35	320.85	490	425	1200	375	1160	1266*566*588	243.5
GDL-H0200-6AL	Cabinet	200	160	92.03	1999	8.4	315	1274.51	453.11	800	800	2000	/	/	916*866*2188	335
GDL-H0200-6AL		200	185	92.03	1999	8.4	315	1274.51	453.11	800	800	2000	/	/	916*866*2188	335
GDL-H0250-6AL		250	200	115.04	2242	10.4	360	1610	524.04	800	800	2000	/	/	916*866*2188	380
GDL-H0250-6AL		250	220	115.04	2242	10.4	360	1610	524.04	800	800	2000	/	/	916*866*2188	380
GDL-H0300-6AL		300	250	138.05	2256	11.2	410	1605.54	518.18	800	800	2000	/	/	916*866*2188	430
GDL-H0300-6AL		300	280	138.05	2256	11.2	410	1605.54	518.18	800	800	2000	/	/	916*866*2188	430
GDL-H0400-6AL		400	315	184.07	2689	13.2	480	2170.05	519.31	800	800	2200	/	/	916*866*2388	501
GDL-H0400-6AL		400	355	184.07	2689	13.2	480	2170.05	519.31	800	800	2200	/	/	916*866*2388	501
GDL-H0480-6AL		480	400	220.88	3429	15.3	520	2451.98	672.49	800	800	2200	/	/	916*866*2388	541
GDL-H0480-6AL		480	450	220.88	3429	15.3	520	2451.98	672.49	800	800	2200	/	/	916*866*2388	541
GDL-H0600-6AL		600	500	276	4210	17.3	620	2796.3	741.13	800	800	2200	/	/	916*866*2388	641
GDL-H0600-6AL		600	560	276	4210	17.3	620	2796.3	741.13	800	800	2200	/	/	916*866*2388	641
GDL-H0800-6AL		800	630	331	4631	19.5	650	3230.88	752.99	800	800	2200	/	/	916*866*2388	671

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