

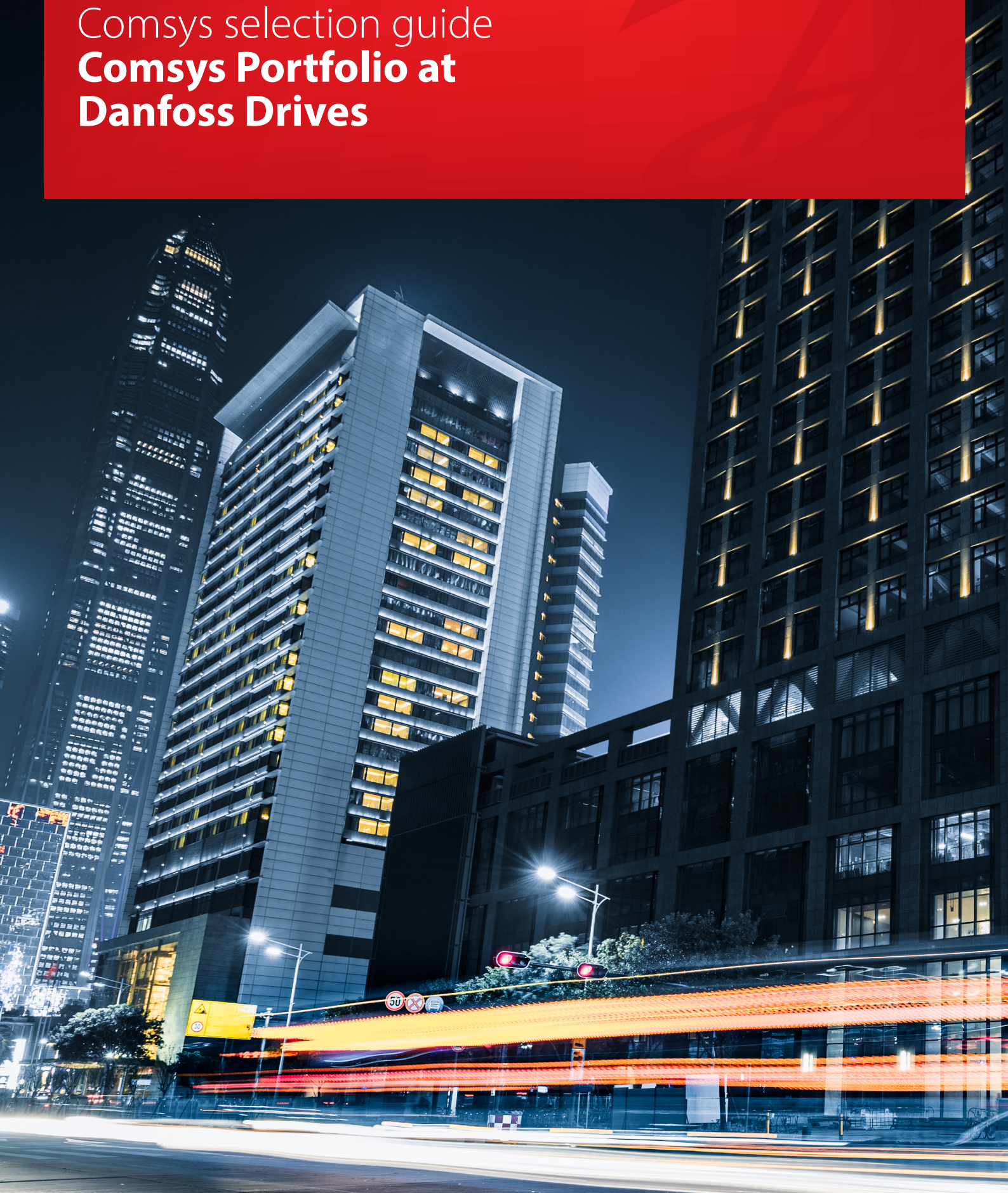
ENGINEERING
TOMORROW

Danfoss

For internal use at Danfoss

Comsys selection guide

Comsys Portfolio at Danfoss Drives



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This document is intended for **internal use at Danfoss only**, and covers the main portfolio from Comsys via Danfoss Drives.

Additional Comsys materials to be quoted by dummy number, and ensured a 099H* global sales code prior to any order handling.

All **prices reflected in this document are Danfoss Global Reference Prices (GRP) in EUR currency**, and should not be discussed with Comsys.

Comsys is a cleantech company, and offers active harmonic solutions under their ADF umbrella to make energy more efficient. They support marine, water treatment, process, data center, renewable energy, and many other industries.

The advanced technology and heavy processes of today's industry put high demands on the electrical grid and make operations vulnerable to a variety of problems; overheating transformers, nuisance tripping, non-compliance, shorter equipment lifetime, production failure/downtime, exceeding norm limits. These problems are caused by a variety of electrical disturbances that weaken power quality.

Comsys' patented Active Dynamic Filtering technology offers harmonic compensation, resonance mitigation, and more. For a thorough presentation of ADF technology and its capabilities, explore their Technology pages at www.comsys.com. Errors may occur in this document.

→ If any in-depth details are needed, please contact Comsys' KAM Piotr Siodman (piotr.siodmak@comsys.se).

→ If any Comsys offerings outside of this Selection Guide is needed, contact Danfoss prod.mgr. Hannes Vahldiek.

Please keep any pricing discussions within Danfoss, due cases of Comsys approaching Danfoss end customers.

ADF P25 active filter

The ADF P25 active filter is compact and cost-effective, and has a nominal compensation current of 30 A RMS (three wire, 480V).

Available as both IP20 and IP21, Danfoss standardizes on including Extended HMI.



A	V	Grid	Encl. class	Net weight	Dimensions	Modelcode	Salescode	GRP
30	415	TN	20	38	237 x 810 x 326 mm	P25-30/415_T-E-----20	099H0931	€ 16.187
			21	38	238 x 810 x 326 mm	P25-30/415_T-E-----21	099H0932	€ 16.616

ADF P100N 4-wire active filter

The ADF P100 family is ultra-efficient and easy to use. Its wall mounted format gives a more cost-effective packaging.

The ADF P100N has a nominal compensation current of 100 A RMS (four wire, 415V). It is available in four wire up to 415 V RMS. The tall and narrow design allows the ADF P100 to be used in applications where space is at a premium.

Danfoss standardizes on including Extended HMI.



A	V	Grid	Encl. class	Net weight	Dimensions	Modelcode	Salescode	GRP
100	415	TN	20	170	230 x 1790 x 470 mm	P100N-100/415_T-E-----20	099H1018	€ 38.610
			21	170	230 x 1790 x 470 mm	P100N-100/415_T-E-----21	099H0444	€ 39.039

ADF P100 3-wire active filter

The ADF P100 family is ultra-efficient and easy to use. Its wall mounted format gives a more cost-effective packaging and allows the use of ADF technology, in IP20 or IP21 enclosures.

The ADF P100 has a nominal compensation current of 70 to 130 A RMS (three wire, 480V), and 90 A RMS (three wire, 690V). It is available in the voltage ranges 208 - 690 V RMS nominal. The tall and narrow design allows the ADF P100 to be used in applications where space is at a premium.

Danfoss standardizes on including Extended HMI.

IMPORTANT: Since 2022 range not to include Multi-Master for P100, with a few exceptions (supplier requirement).



A	V	Grid	Encl. class	Net weight	Dimensions	Modelcode	Salescode	GRP
50		IT	20	91	230 x 1790 x 470 mm	P100-50/480_I-E----20	099H0420	€ 31.565
			21			P100-50/480_I-E----21	099H0421	€ 31.994
		TN	20	91	230 x 1790 x 470 mm	P100-50/480_T-E----20	099H0422	€ 30.278
			21			P100-50/480_T-E----21	099H0423	€ 30.707
75		IT	20	91	230 x 1790 x 470 mm	P100-75/480_I-E----20	099H0424	€ 33.644
			21			P100-75/480_I-E----21	099H0425	€ 34.073
		TN	20	91	230 x 1790 x 470 mm	P100-75/480_T-E----20	099H0426	€ 32.357
			21			P100-75/480_T-E----21	099H0427	€ 32.786
90	480	IT	20	91	230 x 1790 x 470 mm	P100-90/480_I-E----20	099H0428	€ 35.739
			21			P100-90/480_I-E----21	099H0429	€ 36.168
		TN	20	91	230 x 1790 x 470 mm	P100-90/480_T-E----20	099H0430	€ 34.452
			21			P100-90/480_T-E----21	099H0431	€ 34.881
120		IT	20	105	230 x 1790 x 470 mm	P100-120/480_I-E----20	099H0432	€ 39.287
			21			P100-120/480_I-E----21	099H0433	€ 39.716
		TN	20	105	230 x 1790 x 470 mm	P100-120/480_T-E----20	099H0434	€ 38.000
			21			P100-120/480_T-E----21	099H0435	€ 38.429
150		IT	20	116	230 x 1790 x 470 mm	P100-150/480_ICE----20	099H0714	€ 48.444
			21			P100-150/480_ICE----21	099H0715	€ 48.873
		TN	20	116	230 x 1790 x 470 mm	P100-150/480_T-E----20	099H0438	€ 47.157
			21			P100-150/480_TCE----21	099H0716	€ 47.586
90	690	IT	20	91	230 x 1790 x 470 mm	P100-90/690_I-E----20	099H0440	€ 48.659
			21			P100-90/690_I-E----21	099H0441	€ 49.088
		TN	20	91	230 x 1790 x 470 mm	P100-90/690_T-E----20	099H0442	€ 47.372
			21			P100-90/690_T-E----21	099H0443	€ 47.801

ADF P300 active filter

The ADF P300 is the ideal active filter for small and medium size commercial and industrial loads. It is a powerhouse solution and the best choice for most applications because it is such a general purpose active filter.

The state-of-the-art performance of our active filter technology comes encased in a compact cabinet. Each ADF P300 system is delivered with 90-450 A optimization power and the modular design makes it easy and convenient to add future upgrades.



You can start/stop the system, read out power quality data, and change control parameters and settings via fieldbus. The flexible functionality allows integration to overlying control such as a PLC or SCADA systems. The overlying system can change control parameters, or change compensation sets on the fly. This is useful in for example marine- and generator applications. Other fieldbus interfaces (such as Profibus, Profinet) are available on request.

Danfoss standardizes on including Extended HMI and Multi-Master.

**IMPORTANT: P300 IP54 is not available for 690V.
690V variants are only available in CAB8 (800mm cabinets)**

A	V	Grid	Encl. class	Net weight	Cabinet	Modelcode	Salescode	GRP
50		IT	32	335	CAB4	P300-50/480_ICE41Q--32	099H0666	€ 43.989
			43			P300-50/480_ICE41Q--43	099H0667	€ 44.996
			54			P300-50/480_ICE41Q--54	099H0668	€ 46.943
		TN	32	335	CAB4	P300-50/480_TCE41Q--32	099H0669	€ 42.257
			43			P300-50/480_TCE41Q--43	099H0670	€ 43.263
			54			P300-50/480_TCE41Q--54	099H0671	€ 45.210
75		IT	32	335	CAB4	P300-75/480_ICE41Q--32	099H0672	€ 46.662
			43			P300-75/480_ICE41Q--43	099H0673	€ 47.669
			54			P300-75/480_ICE41Q--54	099H0674	€ 49.616
		TN	32	335	CAB4	P300-75/480_TCE41Q--32	099H0675	€ 44.930
			43			P300-75/480_TCE41Q--43	099H0676	€ 45.936
			54			P300-75/480_TCE41Q--54	099H0677	€ 47.883
100	480	IT	32	335	CAB4	P300-100/480_ICE41Q--32	099H0678	€ 49.335
			43			P300-100/480_ICE41Q--43	099H0679	€ 50.342
			54			P300-100/480_ICE41Q--54	099H0680	€ 52.289
		TN	32	335	CAB4	P300-100/480_TCE41Q--32	099H0681	€ 47.603
			43			P300-100/480_TCE41Q--43	099H0682	€ 48.609
			54			P300-100/480_TCE41Q--54	099H0683	€ 50.556
125		IT	32	335	CAB4	P300-125/480_ICE41Q--32	099H0684	€ 52.008
			43			P300-125/480_ICE41Q--43	099H0685	€ 53.015
			54			P300-125/480_ICE41Q--54	099H0686	€ 54.962
		TN	32	335	CAB4	P300-125/480_TCE41Q--32	099H0687	€ 50.276
			43			P300-125/480_TCE41Q--43	099H0688	€ 51.282
			54			P300-125/480_TCE41Q--54	099H0689	€ 53.229
150		IT	32	335	CAB4	P300-150/480_ICE41P--32	099H0447	€ 61.215
			43			P300-150/480_ICE41P--43	099H0251	€ 62.222
			54			P300-150/480_ICE41P--54	099H0414	€ 64.169
		TN	32	335	CAB4	P300-150/480_TCE41O--32	099H0448	€ 59.483
			43			P300-150/480_TCE41O--43	099H0253	€ 60.489
			54			P300-150/480_TCE41O--54	099H0415	€ 62.436
200		IT	32	472	CAB6	P300-200/480_ICE62Q--32	099H0690	€ 78.887
			43			P300-200/480_ICE62Q--43	099H0691	€ 79.893
			54			P300-200/480_ICE62Q--54	099H0692	€ 81.840
		TN	32	472	CAB6	P300-200/480_TCE62Q--32	099H0693	€ 77.154
			43			P300-200/480_TCE62Q--43	099H0694	€ 78.161
			54			P300-200/480_TCE62Q--54	099H0695	€ 80.108

A	V	Grid	Encl. class	Net weight	Cabinet	Modelcode	Salescode	GRP
250		IT	32	472	CAB6	P300-250/480_ICE62Q--32	099H0696	€ 83.226
			43			P300-250/480_ICE62Q--43	099H0697	€ 84.233
			54			P300-250/480_ICE62Q--54	099H0698	€ 86.180
		TN	32	472	CAB6	P300-250/480_TCE62Q--32	099H0699	€ 81.494
			43			P300-250/480_TCE62Q--43	099H0700	€ 82.500
			54			P300-250/480_TCE62Q--54	099H0701	€ 84.447
300	480	IT	32	472	CAB6	P300-300/480_ICE62P--32	099H0451	€ 98.637
			43			P300-300/480_ICE62P--43	099H0259	€ 99.644
			54			P300-300/480_ICE62P--54	099H0416	€ 101.591
		TN	32	472	CAB6	P300-300/480_TCE62O--32	099H0452	€ 96.905
			43			P300-300/480_TCE62O--43	099H0261	€ 97.911
			54			P300-300/480_TCE62O--54	099H0417	€ 99.858
375		IT	32	609	CAB8	P300-375/480_ICE83Q--32	099H0702	€ 116.160
			43			P300-375/480_ICE83Q--43	099H0703	€ 117.167
			54			P300-375/480_ICE83Q--54	099H0704	€ 119.114
		TN	32	609	CAB8	P300-375/480_TCE83Q--32	099H0705	€ 114.428
			43			P300-375/480_TCE83Q--43	099H0706	€ 115.434
			54			P300-375/480_TCE83Q--54	099H0707	€ 117.381
450		IT	32	609	CAB8	P300-450/480_ICE83P--32	099H0933	€ 136.026
			43			P300-450/480_ICE83P--43	099H0934	€ 137.033
			54			P300-450/480_ICE83P--54	099H0729	€ 138.980
		TN	32	609	CAB8	P300-450/480_TCE83O--32	099H0935	€ 134.294
			43			P300-450/480_TCE83O--43	099H0936	€ 135.300
			54			P300-450/480_TCE83O--54	099H0730	€ 137.247
90		IT	32	365	CAB8	P300-90/690_ICE81H--32	099H0961	€ 62.387
			43			P300-90/690_ICE81H--43	099H0962	€ 63.393
			54			P300-90/690_ICE81H--54	099H0963	€ 64.400
		TN	32	365	CAB8	P300-90/690_TCE81G--32	099H0963	€ 60.654
			43			P300-90/690_TCE81G--43	099H0964	€ 61.661
			54			P300-90/690_TCE81G--54	099H0964	€ 61.661
180	690	IT	32	503	CAB8	P300-180/690_ICE82H--32	099H0965	€ 97.086
			43			P300-180/690_ICE82H--43	099H0966	€ 98.093
			54			P300-180/690_ICE82H--54	099H0967	€ 99.100
		TN	32	503	CAB8	P300-180/690_TCE82G--32	099H0967	€ 95.354
			43			P300-180/690_TCE82G--43	099H0968	€ 96.360
			54			P300-180/690_TCE82G--54	099H0968	€ 96.360
270		IT	32	639	CAB8	P300-270/690_ICE83H--32	099H0459	€ 131.786
			43			P300-270/690_ICE83H--43	099H0291	€ 132.792
			54			P300-270/690_ICE83H--54	099H0460	€ 133.798
		TN	32	639	CAB8	P300-270/690_TCE83G--32	099H0460	€ 130.053
			43			P300-270/690_TCE83G--43	099H0293	€ 131.060
			54			P300-270/690_TCE83G--54	099H0293	€ 131.060

Inverter Module PPM300

The ADF PPM300 inverter module is one of the key components of the ADF System Integration Program. Designed for easy integration into electrical cabinets and motor control centers, this component enables you to build your own active harmonic filter or low harmonic solution.

More Information about system integration can be found on <https://danfoss.sharepoint.com/sites/ComsysADFFilters> in the shared documents section for system integration.

With the launch of the new PPM v4 module, v2B modules are only available as 150A/480V and 90A/690V products. 90A/480V and 120A/480V are replaced by 50A/480A, 75A/480A, 100A/480A and 125A/480A modules. The new versions support TN and IT grid. v2B and v4 cannot be combined to same build.



A	V	Grid	Encl. class	Net weight	Dimensions	Modelcode	Salescode	GRP
50	480	I+T	IP20	108	232.5 x 1445 x 431,5 mm	PPM300v4-3-A-50/480-SI	099H0969	€ 23.364
75		I+T	IP20	108	232.5 x 1445 x 431,5 mm	PPM300v4-3-A-75/480-SI	099H0970	€ 25.130
100		I+T	IP20	108	232.5 x 1445 x 431,5 mm	PPM300v4-3-A-100/480-SI	099H0971	€ 26.895
125		I+T	IP20	108	232.5 x 1445 x 431,5 mm	PPM300v4-3-A-125/480-SI	099H0972	€ 28.661
150		IT	IP20	104	232.5 x 1445 x 431,5 mm	PPM300v2B-3-A-150/480_IT-OEM	099H0096	€ 35.393
	TN	PPM300v2B-3-A-150/480_TN-OEM				099H0097	€ 35.393	
90	690	IT	IP20	79	232.5 x 1445 x 431,5 mm	PPM300v2-3-A-90/690_IT-OEM	099H0098	€ 32.192
		TN				PPM300v2-3-A-90/690_TN-OEM	099H0099	€ 32.192

Power module components



Description	Salescode	GRP
Control 3 modules	099H0100	€ 6.353
Control 6 modules	099H0101	€ 10.230
Ambient temp. Sensor	099H0102	€ 124
USB cable to amb. Temp. Sensor	099H0103	€ 28
Extended 4.3" graphical HMI+PIB	099H0104	€ 1.980
Extended 7" graphical HMI+PIB	099H0973	€ 1.980
Aux EMC Filter 480V	099H0105	€ 767
Aux EMC Filter 480V IT	099H0106	€ 875
Aux EMC Filter 690V	099H0107	€ 1.394
Aux EMC Filter 690V IT	099H0108	€ 1.518
Voltage transformer kit IT	099H0109	€ 1.360
DC interconnection 2-modules	099H0110	€ 351
DC interconnection 3-modules	099H0111	€ 602
Air guide PEM-H backplate v2	099H0756	€ 231
Computer Module PPM300v2B IT	099H0974	€ 7.854
Computer Module PPM300v2B TN	099H0975	€ 7.145
Computer Module PPM300v4 IT	099H0976	€ 7.854
Computer Module PPM300v4 TN+SI	099H0977	€ 7.145

Additional (options, spares & services)

This is a selection of single components requested as options, spares or services for Comsys business at Danfoss.

Description	Net weight	Dimensions	Partno.	Salescode	GRP
Control 3 modules	1,5	290 x 210 x 46	100 791	099H0100	€ 6.353
Control 6 modules	1,5	290 x 210 x 46	101 202	099H0101	€ 10.230
Ambient temp. Sensor	1	0	101 600	099H0102	€ 124
USB cable to amb. Temp. Sensor	1	0	100 429	099H0103	€ 28
Extended 4.3" graphical HMI+PIB	1	0	100 924	099H0104	€ 1.980
Extended 7" graphical HMI+PIB	1	0	103 289	099H0973	€ 1.980
Aux EMC Filter 480V	1,3	130 x 120 x 82 mm	917 003	099H0105	€ 767
Aux EMC Filter 480V IT	1,3	130 x 120 x 82 mm	917 006	099H0106	€ 875
Aux EMC Filter 690V	2,5	300 x 175 x 75 mm	917 002	099H0107	€ 1.394
Aux EMC Filter 690V IT	2,5	300 x 175 x 75 mm	100 250	099H0108	€ 1.518
Voltage transformer kit IT	1	0	100 865	099H0109	€ 1.360
DC interconnection 2-modules	1	0	100 618	099H0110	€ 351
DC interconnection 3-modules	1	0	100 619	099H0111	€ 602
DC interconnection for 2 modules v4	1	0	103 291	099H1023	€ 53
Air guide PEM-H backplate v2	2	30 x 500 x 150 MM	100 149	099H0756	€ 231
Air guide PEM-H backplate v4	2	0	102 338	099H1024	€ 231
Cable kit Multi-Master P100	2	0	416 073-OEM	099H0113	€ 660
License key ModBus frct. option	1	0	416 059	099H0318	€ 472
Flicker license	1	0	416 071	099H0363	€ 6.402
Even-order harmonics license	1	0	416 062	099H0364	€ 1.452
Sensorless ctrl. license	1	0	416 076	099H0365	€ 1.601
200mm base for P300-CAB4	5	405 x 200 x 636 mm	102 776	099H0461	€ 990
200mm base for P300-CAB6	5	605 x 200 x 636 mm	102 777	099H0462	€ 990
200mm base for P300-CAB8	5	805 x 200 x 636 mm	102 778	099H0463	€ 990
DNV certificate ADF P100	0	0	102 844	099H0464	€ 2.178
DNV certificate ADF P300	0	0	102 845	099H0465	€ 2.614
LR certificate ADF P100	0	0	LR certificate	099H0892	€ 2.178
LR certificate ADF P300	0	0	LR certificate	099H0893	€ 2.614

NB! DNV & LR certificates not to be discounted ! ABS & BV certificates on request.

ADF cabinet sizing

Series	Designation	Norm of construction	Dimensions
P25	-		230 x 810 x 311 mm
P100	CAB4	For 1 module builds	405 x 2168 x 636 mm
P300	CAB6	For 2 modules builds	605 x 2168 x 636 mm
	CAB8	For 3 modules builds	805 x 2168 x 636 mm



A better tomorrow is **driven by drives**

Danfoss Drives is a world leader in variable speed control of electric motors.

We offer you unparalleled competitive edge through quality, application-optimized products and a comprehensive range of product lifecycle services.

You can rely on us to share your goals. Striving for the best possible performance in your applications is our focus. We achieve this by providing the innovative products and application know-how required to optimize efficiency, enhance usability, and reduce complexity.

From supplying individual drive components to planning and delivering complete drive systems; our experts are ready to support you all the way.

You will find it easy to do business with us. Online, and locally in more than 50 countries, our experts are never far away, reacting fast when you need them.

You gain the benefit of decades of experience, since 1968. Our low voltage and medium voltage AC drives are used with all major motor brands and technologies in power sizes from small to large.

VACON® drives combine innovation and high durability for the sustainable industries of tomorrow.

For long lifetime, top performance, and full-throttle process throughput, equip your demanding process industries and marine applications with VACON® single or system drives.

- Marine and Offshore
- Oil and Gas
- Metals
- Mining and Minerals
- Pulp and Paper

- Energy
- Elevators and Escalators
- Chemical
- Other heavy-duty industries

VLT® drives play a key role in rapid urbanization through an uninterrupted cold chain, fresh food supply, building comfort, clean water and environmental protection.

Outmaneuvering other precision drives, they excel, with remarkable fit, functionality and diverse connectivity.

- Food and Beverage
- Water and Wastewater
- HVAC
- Refrigeration
- Material Handling
- Textile

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