



- PROJECT: AVANTE 2200
- SHIPYARD: NAVANTIA S.A.
- SYSTEM: HVAC



**PROJECT: AVANTE 2200**

**SHIPYARD:**   
Navantia

**SYSTEM: HVAC**

## **CENTRIFUGAL FANS**

**REF.: D-MO5462-099**

<b>REV</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>ISSUED BY</b>	<b>CHECKED BY</b>	<b>APPROVED BY</b>
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## 1. ITEM LIST ACCOMODATION AREA :

### 1.1. GENERAL TECHNICAL DATA:

TYPE	TAG	OPERATION	MODEL	MAKER	AIRFLOW (m3/h)	DESIGN PRESSURE (Pa)	APROX. DIMENSIONS (mm)	IP GRADE	VOLTAGE	MAX ELECT. POWER (kW)	RATED CURRENT (A)	HEAT DISSIP. (Kw)	MOTOR MAKER- MODEL	RPM MOTOR AND FAN	WEIGHT (Kg)	NOISE dB(A) (*NOTE 2)
CENTRIFUGAL	FAN-VEN01001	SUPPLY	CMR-728-2T (Orientation LG 270)	SODECA	1.686	355	453x357x506	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W-21-F80	3380	18	55
CENTRIFUGAL	FAN-VEN01002	SUPPLY	CMR-1031-2T (Orientation LG 270)	SODECA	3.210	1301	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	55
CENTRIFUGAL	FAN-VEN01003	SUPPLY	CMR-1031-2T (Orientation LG 270)	SODECA	3.498	1187	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	55
CENTRIFUGAL	FAN-VEN02004	SUPPLY	CMR-625-2T (Orientation LG 270)	SODECA	250	998	407x343x457	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W-21-F80	3380	14	65
CENTRIFUGAL	FAN-VEN02005	SUPPLY	CMR-1031-2T (Orientation LG 270)	SODECA	2.080	1628	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	55
CENTRIFUGAL	FAN-VEN02006	EXHAUST	CMR-1031-2T (Orientation LG 270)	SODECA	1.955	1663	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	60
DUCT	FAN-VEN01007	EXHAUST	R-200	ROSENBERG	187	350	Ø341x234	IP44	1X230V/60Hz	0,126	0,56	0,018	R-200	2248	4	55
CENTRIFUGAL	FAN-VEN01008	SUPPLY	CMR-731-2T (Orientation LG 270)	SODECA	1.779	1020	507x374x564	IP55	3X440V/60Hz	1,8	3,44	0,306	WEG-W21-F90S	3410	23	70
CENTRIFUGAL	FAN-VEN01009	EXHAUST	CMR-1031-2T (Orientation LG 270)	SODECA	3.352	1248	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	60
CENTRIFUGAL	FAN-VEN01010	SUPPLY	CMR-728-2T (Orientation LG 270)	SODECA	1.100	1089	453x357x506	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W-21-F80	3380	18	65
CENTRIFUGAL	FAN-VEN01011	EXHAUST	CMR-731-2T (Orientation LG 270)	SODECA	1.500	1284	507x374x564	IP55	3X440V/60Hz	1,8	3,44	0,306	WEG-W21-F90S	3410	23	68
CENTRIFUGAL	FAN-VEN01012	SUPPLY	CMR-622-2T SPARK RESISTANT (Orientation LG 270)	SODECA	250	715	364x338x415	IP55	3X440V/60Hz	0,62	1,32	0,117	WEG-W21-F71	3315	12	75
CENTRIFUGAL	FAN-VEN01013	EXHAUST	CMP-616-2T ATEX ZONE 2 (Orientation LG 0)	SODECA	250	776	258x320x297	IP55	3X440V/60Hz	0,55	1,18	0,082	WEG-W22Xec-F71 ATEX ZONE 2	3400	19	75
CENTRIFUGAL	FAN-VEN01014	EXHAUST	CMP-616-2T ATEX ZONE 1 (Orientation LG 0)	SODECA	188	770	258x320x297	IP55	3X440V/60Hz	0,55	1,18	0,082	WEG-W22Xeb-F71 ATEX ZONE 1	3400	23	75
CENTRIFUGAL	FAN-VEN01015	EXHAUST	CMR-1031-2T (Orientation LG 270)	SODECA	2.586	1499	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	55
CENTRIFUGAL	FAN-VEN02016	SUPPLY	CMR-622-2T SPARK RESISTANT (Orientation LG 270)	SODECA	125	732	364x338x415	IP55	3X440V/60Hz	0,62	1,32	0,117	WEG-W21-F71	3315	12	75
CENTRIFUGAL	FAN-VEN02017	EXHAUST	CMP-616-2T ATEX ZONE 2 (Orientation LG 90)	SODECA	125	762	258x320x297	IP55	3X440V/60Hz	0,55	1,18	0,082	WEG-W22Xec-F71 ATEX ZONE 2	3400	19	75



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TYPE	TAG	OPERATION	MODEL	MAKER	AIRFLOW (m3/h)	DESIGN PRESSURE (Pa)	APROX. DIMENSIONS (mm)	IP GRADE	VOLTAGE	MAX ELECT. POWER (kW)	RATED CURRENT (A)	HEAT DISSIP. (Kw)	MOTOR MAKER- MODEL	RPM MOTOR AND FAN	WEIGHT (Kg)	NOISE dB(A) (*NOTE 2)
CENTRIFUGAL	FAN-VEN02018	SUPPLY	CMR-1031-2T (Orientation LG 270)	SODECA	1.530	1750	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	60
CENTRIFUGAL	FAN-VEN02019	EXHAUST	CMR-1031-2T (Orientation LG 270)	SODECA	1.530	1750	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	75
CENTRIFUGAL	FAN-VEN01023	SUPPLY	CMR-625-2T SPARK RESISTANT (Orientation LG 270)	SODECA	472	974	407x343x457	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W-21-F80	3380	14	75
CENTRIFUGAL	FAN-VEN01024	EXHAUST	CMP-616-2T ATEX ZONE 2 (Orientation LG 90)	SODECA	472	748	258x320x297	IP55	3X440V/60Hz	0,55	1,18	0,082	WEG-W22Xec-F71 ATEX ZONE 2	3400	19	75
CENTRIFUGAL	FAN-VEN01025	SUPPLY	CMR-625-2T SPARK RESISTANT (Orientation LG 270)	SODECA	476	980	407x343x457	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W-21-F80	3380	14	75
CENTRIFUGAL	FAN-VEN01026	EXHAUST	CMP-616-2T ATEX ZONE 2 (Orientation LG 270)	SODECA	476	750	258x320x297	IP55	3X440V/60Hz	0,55	1,18	0,082	WEG-W22Xec-F71 ATEX ZONE 2	3400	19	75
CENTRIFUGAL	FAN-VEN01028	EXHAUST	CMR-1031-2T (Orientation LG 270)	SODECA	2799	1417	542x573x626	IP55	3X440V/60Hz	2,6	4,76	0,416	WEG-W-21-F90L	3370	45	65
CENTRIFUGAL	FAN-VEN02029	SUPPLY	CMR-622-2T (Orientation LG 270)	SODECA	125	732	364x338x415	IP55	3X440V/60Hz	0,62	1,32	0,117	WEG-W21-F71	3315	12	75
CENTRIFUGAL	FAN-VEN02030	SUPPLY	CMP-616-2T SPARK RESISTANT (Orientation LG 90)	SODECA	125	762	258x320x297	IP55	3X440V/60Hz	0,62	1,32	0,117	WEG-W21-F71	3315	12	75
CENTRIFUGAL	FAN-VEN02031	EXHAUST	CMP-616-2T ATEX ZONE 2 (Orientation LG 90)	SODECA	125	762	258x320x297	IP55	3X440V/60Hz	0,55	1,18	0,082	WEG-W22Xec-F71 ATEX ZONE 2	3400	19	75
CENTRIFUGAL	FAN-VEN01032	SUPPLY	CMP-616-2T SPARK RESISTANT (Orientation LG 90)	SODECA	188	762	258x320x297	IP55	3X440V/60Hz	0,62	1,32	0,117	WEG-W21-F71	3315	12	75
DUCT	FAN-VEN02033	EXHAUST	R-200	ROSENBERG	250	320	Ø341x234	IP44	1X230V/60Hz	0,126	0,56	0,018	R-200	2248	4	65
CENTRIFUGAL	FAN-VEN01034	EXHAUST	CMR-625-2T (Orientation LG 270)	SODECA	745	915	407x343x457	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W-21-F80	3380	14	55
CENTRIFUGAL	FAN-VEN01035	EXHAUST	CMR-625-2T (Orientation LG 270)	SODECA	625	960	407x343x457	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W-21-F80	3380	14	55
DUCT	FAN-VEN02036	EXHAUST	R-200	ROSENBERG	125	370	Ø341x234	IP44	1X230V/60Hz	0,126	0,56	0,018	R-200	2248	4	75

\*NOTE 1: For fan accessories and dimensional details see drawing P-MO5462-023 REVC

\*NOTE 2: Maximum noise radiated in the served space. In case of FANS attending to spaces of different typology, the value for the most restrictive space has been indicated.



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## 1.2. TECHNICAL AND FUNCIONAL DESCRIPTION:

Class W: Fan operating or closure opens under all conditions of ship operation. The fans shall only be closed or stopped for repair purposes.

Class (W): Fan secured or closure closed only during NBC warfare.

Class Z: Fan normally operating and closure normally open but secured or closed respectively during *General Quarters*.

Class X: Fan normally secured and closure normally closed. Fan is operated and closure opened only when the Damage Control Officer authorizes blowout of the space served by the fan and closure.

\*NOTE: for more details see document "D-MO5462-094, Functional description"

TAG	OPERATION	OPERATIONAL DESCRIPTION	CLASS.
FAN-VEN01001	SUPPLY	Outdoor forced air supply to its served space	(W)
FAN-VEN01002	SUPPLY	Outdoor forced air supply to its served spaces	Z
FAN-VEN01003	SUPPLY	Outdoor forced air supply to its served space	Z
FAN-VEN02004	SUPPLY	Outdoor forced air supply to its served space	(W)
FAN-VEN02005	SUPPLY	Outdoor forced air supply to its served space	Z
FAN-VEN02006	EXHAUST	Forced air exhaust from its served space	Z
FAN-VEN01007	EXHAUST	Forced air exhaust from its served space	(W)
FAN-VEN01008	SUPPLY	Outdoor forced air supply to its served spaces	Z
FAN-VEN01009	EXHAUST	Forced air exhaust from its served spaces	Z
FAN-VEN01010	SUPPLY	Outdoor forced air supply to its served space	Z
FAN-VEN01011	EXHAUST	Forced air exhaust from its served space	Z
FAN-VEN01012	SUPPLY	Outdoor forced air supply to its served space	X
FAN-VEN01013	EXHAUST	Forced air exhaust from its served space	X
FAN-VEN01014	EXHAUST	Forced air exhaust from its served spaces	Z
FAN-VEN01015	EXHAUST	Forced air exhaust from its served space	Z
FAN-VEN02016	SUPPLY	Outdoor forced air supply to its served space	X
FAN-VEN02017	EXHAUST	Forced air exhaust from its served space	X
FAN-VEN02018	SUPPLY	Outdoor forced air supply to its served space	Z
FAN-VEN02019	EXHAUST	Forced air exhaust from its served space	Z
FAN-VEN01023	SUPPLY	Outdoor forced air supply to its served space	X
FAN-VEN01024	EXHAUST	Forced air exhaust from its served space	X
FAN-VEN01025	SUPPLY	Outdoor forced air supply to its served space	X
FAN-VEN01026	EXHAUST	Forced air exhaust from its served space	X
FAN-VEN01028	EXHAUST	Forced air exhaust from its served space	Z
FAN-VEN02029	SUPPLY	Outdoor forced air supply to its served space	(W)
FAN-VEN02030	SUPPLY	Outdoor forced air supply to its served space	X
FAN-VEN02031	EXHAUST	Forced air exhaust from its served space	X
FAN-VEN01032	SUPPLY	Outdoor forced air supply to its served space	Z
FAN-VEN02033	EXHAUST	Forced air exhaust from its served space	(W)
FAN-VEN01034	EXHAUST	Forced air exhaust from its served space	(W)



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TAG	OPERATION	OPERATIONAL DESCRIPTION	CLASS.
FAN-VEN01035	EXHAUST	Forced air exhaust from its served space	(W)
FAN-VEN02036	EXHAUST	Forced air exhaust from its served space	(W)



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## 2. ITEM LIST ENGINE ROOM, GENERATOR ROOMS & AUXILIARY MACHINERY ROOM AREA:

### 2.1. GENERAL TECHNICAL DATA:

TYPE	TAG	OPERATION	MODEL	MAKER	AIRFLOW (m3/h)	DESIGN PRESSURE (Pa)	APROX. DIMENSIONS (mm)	IP GRADE	VOLTAGE	MAX ELECT. POWER (kW)	RATED CURRENT (A)	HEAT DISSIP. (Kw)	MOTOR MODEL	RPM MOTOR	WEIGHT (Kg)	NOISE dB(A) (*NOTE 1)
CENTRIFUGAL	FAN-VES01002	SUPPLY	CMR-625-2T (Orientation LG 270)	SODECA	500	1000	407x343x457	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W-21-F80	3380	14	75
CENTRIFUGAL	FAN-VES01019	EXHAUST	CMR-625-2T (Orientation LG 270)	SODECA	500	1000	407x343x457	IP55	3X440V/60Hz	0,85	1,91	0,187	WEG-W21-F80	3380	14	75
CENTRIFUGAL	FAN-VES02020	EXHAUST	CMP-616-2T (Orientation LG 90)	SODECA	655	706	258x320x297	IP55	3X440V/60Hz	0,62	1,32	0,117	WEG-W21-F71	3315	12	65

\*For fan accessories and dimensional details see drawing P-MO5462-023 REVC

\*NOTE 1: Maximum noise radiated in the served space. In case of FANS attending to spaces of different typology, the value for the most restrictive space has been indicated.

### 2.2. TECHNICAL AND FUNCIONAL DESCRIPTION:

Class (W): Fan secured or closure closed only during NBC warfare.

\*NOTE: for more details see document "D-MO5462-094, Functional description"

TAG	OPERATION	CLASS.
FAN-VES01002	SUPPLY	(W)
FAN-VES01019	EXHAUST	(W)
FAN-VES02020	EXHAUST	X