GENERAL SPECIFICATIONS:

RATING
For motor/drive system sizes
5HP(3.75kW) to 1600HP(1200kW)[8]

VOLTAGE
Standard voltages up to 690V
3 phase

OVERLOAD CAPABILITY
Suitable for overload of 150% for 60 seconds every 60 minutes

SWITCHING FREQUENCY
1 kHz to 16 kHz model dependent

MOTOR FREQUENCY
Up to 400Hz model dependent
*Contact factory for higher motor frequency, up to 400Hz

VOLTAGE DISTORTION (THD)
3% typical (Max. 5%)
(at full load and at rated frequency)

INPUT CURRENT DISTORTION
< 8% @ Full Load

EFFICIENCY
3 to 15HP: >99%
20 to 700HP: >99.3%
800 to 1600HP: >99.5%

OPERATING AMBIENT TEMPERATURE
-40°C to +40°C (-40°F to 104°F)

ELEVATION
≤ 3300ft [1000m] above sea level
*for higher elevation, please contact factory for -ED model

VENTILATION
Convection air cooled

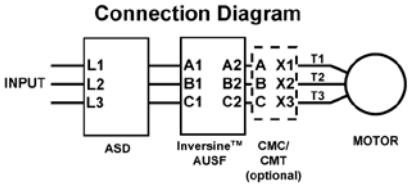
WINDING MATERIAL
Copper

ENCLOSURE
Type: NEMA-3R (5 – 1600HP)
Paint: Polyester powder coated
Colour: ANSI 61 Grey
Wall Mtg Capability: 5 to 75HP

OPTIONS:

NEMA-3R Enhanced Outdoor Ventilated Enclosure

Connection Diagram



Motor Size		Filter Rating [60 Hz]					Standard Enclosure	
HP	kW	Output Amps[3] 480V	600V	690V	Output kVA	kW	Case[9] Style	Weight lb [kg][7]
5	3.75	7.6	6.1	5.5	6	4.4	SU1	36 [16]
7.5	5.5	11	9	7.6	9	6.4	SU1	43 [20]
10	7.5	14	11	10	12	8.5	SU1	50 [23]
15	11	21	17	15	17	12.4	SU1	64 [29]
20	15	27	22	19	22	16.8	SU2	77 [35]
25	18.5	34	27	24	28	20.7	SU2	90 [41]
30	22	40	32	28	33	24.2	SU2	103 [47]
40	30	52	41	36	43	33.0	SU3	128 [58]
50	37.5	65	52	45	54	40.9	SU3	151 [68]
60	45	77	62	54	64	49	SU4	173 [78]
75	55	96	77	67	80	59	SU4	205 [93]
100	75	124	99	86	103	81	MT3	253 [115]
125	90	156	125	109	130	96	MT3	296 [134]
150	110	183	146	128	152	118	MT3	335 [152]
175	132	216	173	151	180	141	MT3	370 [168]
200	150	244	195	171	203	159	MT3	405 [184]
250	185	302	242	212	251	196	MT4	468 [212]
300	220	361	289	254	300	232	MT4	526 [239]
350	250	416	337	296	346	263	MT4	581 [264]
400	315	488	395	360	406	330	MT4	634 [288]
450	355	550	445	403	457	372	MT4	681 [309]
500	400	617	499	452	513	418	MT4	728 [330]
600	450	694	562	493	577	470	LT1	1278 [580]
700	500	805	644	575	669	522	LT1	1409 [639]
800	560	920	736	653	765	585	LT1	1523 [691]
900	630	1035	828	735	860	658	LT1	1624 [737]
1000	710	1137	920	817	945	741	LT2	1713 [777]
1100	800	1250	1012	898	1039	835	LT2	1795 [814]
1200	900	1371	1110	985	1140	939	LT2	1869 [848]
1300	970	1478	1182	1050	1229	1013	LT3	1937 [879]
1400	1000	1591	1273	1130	1323	1044	LT3	2000 [907]
1500	1120	1706	1365	1212	1418	1169	LT3	2059 [934]
1600	1200	1828	1463	1299	1520	1253	LT3	2114 [959]

Motor Size		Filter Rating [50 Hz]				Standard Enclosure	
HP	kW	Output Amps[3] 400V	440V	Output kVA	kW	Case[9] Style	Weight lb [kg][7]
5	3.75	9.7	8.8	7	5.3	SU1	58 [26]
7.5	5.5	13	12	9	7.6	SU1	67 [30]
10	7.5	17	16	12	9.9	SU2	78 [35]
15	11	25	23	17	14.2	SU2	90 [41]
20	15	33	30	23	18.9	SU2	118 [54]
25	18.5	41	37	28	23.1	SU2	130 [59]
30	22	48	44	33	26.9	SU2	142 [65]
40	30	63	58	44	36.3	SU3	154 [70]
50	37.5	78	72	54	44.8	SU3	186 [84]
60	45	93	85	64	54	SU4	218 [99]
75	55	115	106	80	64	SU4	304 [138]
100	75	160	137	111	87	MT3	323 [147]
125	90	186	170	129	103	MT3	345 [156]
150	110	222	204	154	126	MT3	365 [166]
175	132	262	240	182	151	MT3	390 [177]
200	150	296	271	205	170	MT3	415 [189]
250	185	368	337	255	209	MT4	578 [262]
300	220	441	404	306	246	MT4	585 [266]
350	250	515	471	357	280	MT4	651 [295]
400	315	625	572	433	351	MT4	700 [318]
450	355	700	641	485	396	MT4	783 [355]
500	400	785	718	544	444	LT1	865 [392]
600	450	856	784	593	500	LT1	980 [445]
700	500	998	914	691	555	LT1	1165 [528]
800	560	1135	1039	786	622	LT2	1380 [626]
900	630	1277	1169	885	700	LT2	1591 [722]
1000	710	1419	1299	983	788	LT3	1788 [811]
1100	800	1560	1429	1081	888	LT3	1895 [860]
1200	900	1711	1567	1185	999	LT3	1978 [897]
1300	970	1823	1669	1263	1077	LT3	2056 [933]
1400	1000	1963	1797	1360	1110	LT4	2408 [1092]
1500	1120	2105	1927	1458	1244	LT4	2540 [1152]
1600	1200	2255	2065	1562	1333	LT4	2613 [1185]

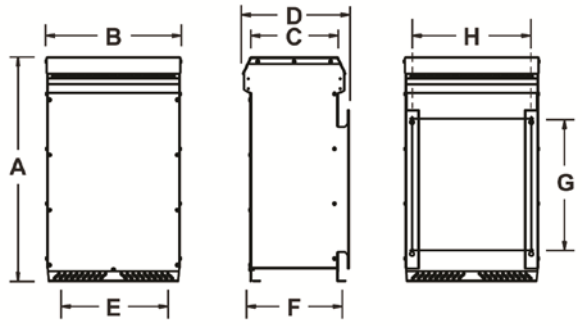
Product Code:

AUSF - HP - VVV - Ff - En - O

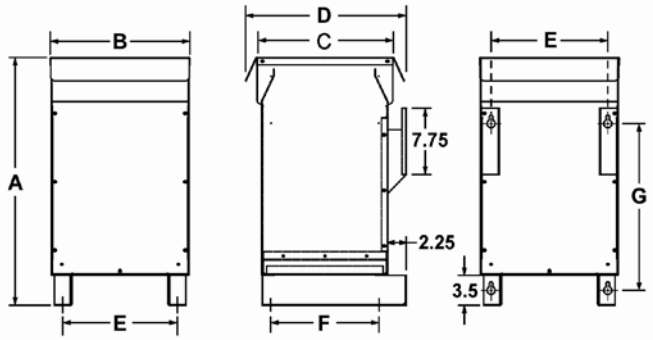
- **AUSF** — Advanced Universal Sine-wave Filter
- **HP** — Motor Horsepower: 5 to 1600 HP
- **VVV** — Line Voltage: All standard voltages up to 690 VAC
- **Ff** — Frequency (Min. Switching kHz / Operating Hz):
  - 15 = 1kHz / 50Hz
  - 16 = 1kHz / 60Hz
  - 212 = 2kHz / 120Hz
  - 320 = 3kHz / 200Hz
  - 325 = 3kHz / 250Hz
  - 430 = 4kHz / 300Hz
  - 435 = 4kHz / 350Hz
  - 540 = 5kHz / 400Hz
- **En** — Enclosure:
  - E0 = No Enclosure
  - E0P = No Enclosure Panelmount
  - E0M = No Enclosure Modular
  - E1 = Standard Enclosure
  - E1E = Type 3R Enhanced
- **O** — *Options*

CASE STYLE	ENCLOSURE DIMENSIONS - inches [mm]							
	A	B	C	D	E	F	G	H
SU1	23.50 [597]	11.25 [286]	8.75 [222]	11.25 [286]	9.00 [229]	9.50 [242]	12.00 [305]	9.00 [228]
SU2	30.00 [762]	13.25 [336]	10.25 [260]	12.75 [324]	11.00 [279]	11.25 [286]	16.00 [406]	11.00[279]
SU3	34.00 [864]	20.25 [514]	13.25 [336]	16.00 [406]	18.00 [457]	14.25 [362]	20.00 [508]	18.00[457]
MT2	40.00 [1016]	22.00 [559]	19.75 [502]	22.00 [559]	20.00 [508]	20.00 [508]		
MT3	45.00 [1143]	26.00 [661]	21.00 [534]	25.00 [635]	21.50 [546]	19.00 [483]		
MT4	51.50 [1308]	32.00 [813]	25.50 [648]	29.50 [749]	23.50 [597]	23.50 [597]		
LT1	59.00 [1499]	39.50 [1003]	30.00 [762]	34.00 [864]	24.00 [610]	32.00 [813]		
LT2	66.00 [1677]	44.00 [1118]	34.00 [864]	38.00 [965]	26.00 [660]	36.00 [915]		
LT3	75.00 [1905]	48.50 [1232]	39.00 [991]	43.00 [1092]	27.50 [699]	41.00 [1041]		

'SU' ENCLOSURE



'MT', 'LT' ENCLOSURE



Notes:

1. Select Inversine Filter based on current rating of the motor for both variable and constant torque applications.
2. Where a single Inversine Filter is used to supply multiple motors, the Inversine Filter current rating must be sized for the total current rating of all motors.
3. For applications that exceed NEC ratings, use next larger size Inversine Filter.
4. For power inverter applications with isolation transformer or step-up transformer, the Inversine Filter current rating should be equal to or greater than that of the transformer nominal primary current.
5. For ASD switching frequency below 1kHz, please consult factory.
6. Short circuit current rating not required under the exception No.1 of UL508A SB.4.2.1
7. Approximate Values.
8. Specifications are subject to change without notice.
9. Enclosures are based on 50Hz or 60Hz operating frequency. For higher operating frequencies, consult the factory. Cable entry is from left or right side only unless otherwise indicated.
10. For additional information refer to: Typical Specifications, Internal Layout and Connection Diagrams.