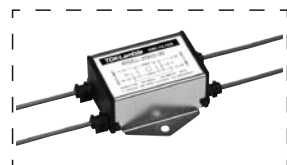


# ZWQ80 (Forced Air Cooling) Specifications

ITEMS/UNITS		MODEL	ZWQ80-5225				ZWQ80-5222				ZWQ80-5224				ZWQ80-5223			
		CH	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input	Current (100/200VAC) (typ) (*3)	A	1.6 / 0.8															
	Nominal Voltage	V	+5	+12	-12	+5	+5	+12	-12	+12	+5	+12	-12	+24	+5	+12	-12	+3.3
Output	Minimum Current (*1)	A	1.4	0	0	0	1.4	0	0	0	1.4	0	0	0	1.4	0	0	9.0
	Maximum Current	A	10.0	2.5	2.5	9.0	10.0	2.5	2.5	4.0	10.0	2.5	2.5	2.0	10.0	2.5	2.5	9.0
Total Allowable Power (*2)		W	104				104				104				88.7			
Environment	Operating Temperature (*4)		-10 to +70 (-10 to+50 : 100%, +70 : 50%)															
	Cooling (*5)		Forced air cooling															

- (\*1) For V2, V3,V4 stability, require minimum output current of V1.  
When it is using under condition of forced air cooling, V1 minimum output current is same as convection cooling.
- (\*2) Allowable output power is changed according to V4 voltage (ZWQ-5225 and -5223 only), refer to derating table.
- (\*3) At 100/200VAC, Ta=25°C total allowable output power.
- (\*4) At standard mounting.  
- Load (%) is percent of total allowable output power or each maximum output current, whichever is greater.  
For other mountings, refer to derating curve.
- (\*5) Air flow > 0.85m<sup>3</sup>/min (30cfm)

**● Recommended EMC Filter**



RSEL-2003W

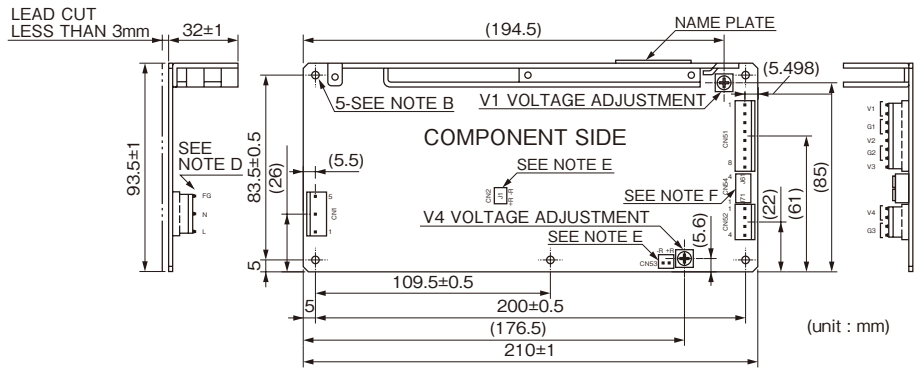
Please refer to "TDK-Lambda EMC Filters" catalog.

# Outline Drawing

## [ZWQ80]

**= NOTES =**

- A: MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT AND COUNTRY OF MANUFACTURE ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.
- B: 5-φ3.5 HOLES FOR CUSTOMER'S CHASSIS MOUNTING HOLES. ALL MUST BE SCREWED IN ORDER TO CONFORM THE VIBRATION SPEC.
- C: KEEP THE DISTANCE MORE THAN 4mm BETWEEN PCB EDGE AND CUSTOMER'S CHASSIS.
- D: FG IS FOR SAFETY GROUND CONNECTION.
- E: REMOTE ON/OFF CONTROL CONNECTOR (CN2, 53)  
: B2B-XH-AM (J.S.T.)  
MATCHING HOUSING : XHP-2 (J.S.T.)  
MATCHING TERMINAL : BXH-001T-P0.6 (J.S.T.) OR SXH-001T-P0.6 (J.S.T.)  
\*CN2 IS NORMALLY SHORTED BY JM-2W-96 (J.S.T.)
- F: CONNECTOR TO CHANGE V2,V3 OUTPUT VOLTAGE (CN54) : B4B-XH-AM (J.S.T.)  
J61 SHORT : V2 OUTPUT VOLTAGE IS +12V.(\*)  
J61 OPEN : V2 OUTPUT VOLTAGE IS +15V.  
J71 SHORT : V3 OUTPUT VOLTAGE IS -12V.(\*)  
J71 OPEN : V3 OUTPUT VOLTAGE IS -15V.  
\*J61 AND J71 ARE NORMALLY SHORTED BY JM-2W-96 (J.S.T.)



**CONNECTORS USED:**

PART DESCRIPTION	PART NAME	MANUFACT.	QTY
PIN HEADER (INPUT SIDE CN1)	B3P-5-VH	J.S.T.	1
PIN HEADER (OUTPUT SIDE CN51)	B8P-VH	J.S.T.	1
PIN HEADER (OUTPUT SIDE CN52)	B4P-VH	J.S.T.	1

**MATCHING HOUSINGS & PINS (NOT INCLUDED WITH THE PRODUCT):**

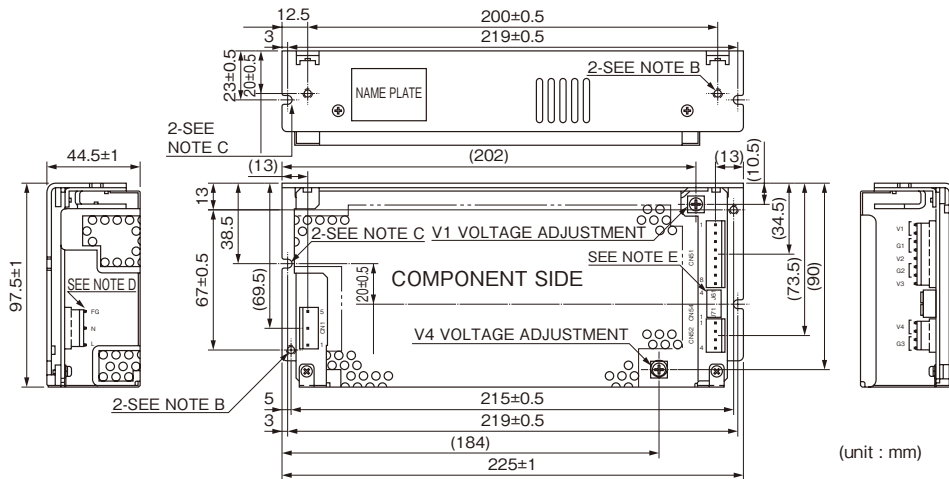
PART DESCRIPTION	PART NAME	MANUFACT.	QTY
SOCKET HOUSING (CN1)	VHR-5N	J.S.T.	1
SOCKET HOUSING (CN51)	VHR-8N	J.S.T.	1
SOCKET HOUSING (CN52)	VHR-4N	J.S.T.	1
TERMINAL PINS (CN1, 51, 52)	SVH-21T-P1.1	J.S.T.	15

\*OUTPUT CURRENT OF EACH CONNECTOR PIN MUST BE LESS THAN 5A. HAND CRIMPING TOOL: YC-160R MANUFACT.: J.S.T.

## [ZWQ80/A]

**= NOTES =**

- A: MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT AND COUNTRY OF MANUFACTURE ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.
- B: M4 EMBOSSED, TAPPED AND COUNTERSUNK HOLES (4) FOR CUSTOMER'S CHASSIS MOUNTING. SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 6mm.
- C: φ4.5 HOLE FOR CUSTOMER'S CHASSIS MOUNTING. (USE M4 MOUNTING SCREW.)
- D: FG IS FOR SAFETY GROUND CONNECTION.
- E: CONNECTOR TO CHANGE V2,V3 OUTPUT VOLTAGE (CN54) : B4B-XH-AM (J.S.T.)  
J61 SHORT : V2 OUTPUT VOLTAGE IS +12V.(\*)  
J61 OPEN : V2 OUTPUT VOLTAGE IS +15V.  
J71 SHORT : V3 OUTPUT VOLTAGE IS -12V.(\*)  
J71 OPEN : V3 OUTPUT VOLTAGE IS -15V.  
\*J61 AND J71 ARE NORMALLY SHORTED BY JM-2W-96 (J.S.T.)



**CONNECTORS USED:**

PART DESCRIPTION	PART NAME	MANUFACT.	QTY
PIN HEADER (INPUT SIDE CN1)	B3P-5-VH	J.S.T.	1
PIN HEADER (OUTPUT SIDE CN51)	B8P-VH	J.S.T.	1
PIN HEADER (OUTPUT SIDE CN52)	B4P-VH	J.S.T.	1

**MATCHING HOUSINGS & PINS (NOT INCLUDED WITH THE PRODUCT):**

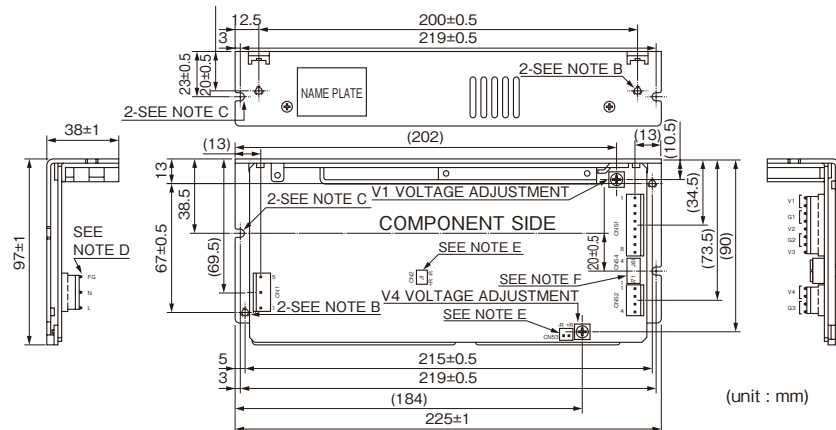
PART DESCRIPTION	PART NAME	MANUFACT.	QTY
SOCKET HOUSING (CN1)	VHR-5N	J.S.T.	1
SOCKET HOUSING (CN51)	VHR-8N	J.S.T.	1
SOCKET HOUSING (CN52)	VHR-4N	J.S.T.	1
TERMINAL PINS (CN1, 51, 52)	SVH-21T-P1.1	J.S.T.	15

\*OUTPUT CURRENT OF EACH CONNECTOR PIN MUST BE LESS THAN 5A. HAND CRIMPING TOOL: YC-160R MANUFACT.: J.S.T.

## [ZWQ80/L]

**= NOTES =**

- A: MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT AND COUNTRY OF MANUFACTURE ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.
- B: M4 EMBOSSED, TAPPED AND COUNTERSUNK HOLES (4) FOR CUSTOMER'S CHASSIS MOUNTING. SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 6mm.
- C: φ4.5 HOLE FOR CUSTOMER'S CHASSIS MOUNTING. (USE M4 MOUNTING SCREW. TIGHTENING TORQUE IS 1.08N·m (11kgf·cm).)
- D: FG IS FOR SAFETY GROUND CONNECTION.
- E: REMOTE ON/OFF CONTROL CONNECTOR (CN2,53) : B2B-XH-AM (J.S.T.)  
MATCHING HOUSING : XHP-2 (J.S.T.)  
MATCHING TERMINAL : BXH-001T-P0.6 (J.S.T.) OR SXH-001T-P0.6 (J.S.T.)  
\*CN2 IS NORMALLY SHORTED BY JM-2W-96 (J.S.T.)  
\*HAND CRIMPING TOOL: YC-110R OR YSR-110 (J.S.T.)
- F: CONNECTOR TO CHANGE V2, V3 OUTPUT VOLTAGE (CN54) : B4B-XH-AM (J.S.T.)  
J61 SHORT : V2 OUTPUT VOLTAGE IS +12V.(\*)  
J61 OPEN : V2 OUTPUT VOLTAGE IS +15V.  
J71 SHORT : V3 OUTPUT VOLTAGE IS -12V.(\*)  
J71 OPEN : V3 OUTPUT VOLTAGE IS -15V.  
\*J61 AND J71 ARE NORMALLY SHORTED BY JM-2W-96 (J.S.T.)



**CONNECTORS USED:**

PART DESCRIPTION	PART NAME	MANUFACT.	QTY
PIN HEADER (INPUT SIDE CN1)	B3P-5-VH	J.S.T.	1
PIN HEADER (OUTPUT SIDE CN51)	B8P-VH	J.S.T.	1
PIN HEADER (OUTPUT SIDE CN52)	B4P-VH	J.S.T.	1

**MATCHING HOUSINGS & PINS (NOT INCLUDED WITH THE PRODUCT):**

PART DESCRIPTION	PART NAME	MANUFACT.	QTY
SOCKET HOUSING (CN1)	VHR-5N	J.S.T.	1
SOCKET HOUSING (CN51)	VHR-8N	J.S.T.	1
SOCKET HOUSING (CN52)	VHR-4N	J.S.T.	1
TERMINAL PINS (CN1, 51, 52)	SVH-21T-P1.1	J.S.T.	15

\*OUTPUT CURRENT OF EACH CONNECTOR PIN MUST BE LESS THAN 5A. HAND CRIMPING TOOL: YC-160R MANUFACT.: J.S.T.

ZWQ