
SERVICE BULLETIN

Original Issue Date: **6/02**

Model: **DDC/MTU Power Generation Generator Set and Transfer Switch Models**

Market: **All**

Subject: **Generator Set and Transfer Switch
Year of Manufacture and Model Designation**

Introduction

Use this bulletin to (1) determine the year of manufacture of a generator set or transfer switch and (2) understand the model code designation. The manufacturer of DDC/MTU Power Generation products created this bulletin realizing that distributors and dealers encounter customers wishing to date their equipment as well as understand the significance of the model numbers.

Information Needed to Identify Products

The serial number determines the year of manufacture. If the factory issues a serial number late in the year, the unit may not have been completed until the following year.

Determine the following information prior to using this bulletin.

- Model number.*
- Serial number (S/N).* The serial number has 6 digits. Record the serial number exactly as it appears on the nameplate including leading zeros, such as 002500.

* Data printed on or stamped into the generator set or transfer switch nameplate.

Review any documentation accompanying the equipment as it may also be helpful in determining the year of manufacture.

Significant Year of Manufacture Notes and Exceptions

Use the KOHLERnet Warranty section to determine the unit build dates. KOHLERnet is the Internet-based tool through which the DDC/MTU Power Generation authorized distributors have access to generator set information.

Generator Set and Transfer Switch Model Code Information

Find the nameplate on the generator set or transfer switch. Read the information below and use the tables on the following pages to interpret the model code.

Generator Set Model Code

Refer to Figure 1 to interpret the generator set nameplate model number.

The Primary Designation group contains several letters that, although they apply to the unit, may not appear in the model number.

The model designation of some units built since 1995 contains no AC voltage, phase, or wire code information.

The model designation reflects the factory configuration. The nameplate may not reflect field changes to the voltage/frequency or fuel system.

Transfer Switch Model Code

Refer to Figure 2 or **Figure 3** interpret the transfer switch nameplate model number.

The transfer switch model designation system defines the characteristics and ratings of transfer switches.

Routing	Service Manager	Sales Manager	Parts Manager	Technician No. 1	Technician No. 2	Technician No. 3	Return This to
Initial Here							

Generator Set Model Designation

Use the information below to interpret the generator set model designation.

Sample Model Designation

100DSEJ-4

Nominal Wattage (2–4 digits)

This number represents nominal wattage in kilowatts.

Primary Designation (first 2 letters)

GS Gasoline, LP gas, or natural gas
DS Diesel

Secondary Designation (1–5 digits)

Not Shown Detroit Diesel
B*
E Emission-reduced engine
G General Motors
J John Deere
M Mitsubishi
W Waukesha
-4 4-cycle engine

* The last character following a variation of the original model. Example: 20DSEJ indicates the first version and 20DSEJB indicates the second version.

Figure 1 Generator Set Model Designation

Transfer Switch Model Designation

Use the information below to interpret the transfer switch model designation.

Sample Model Designation

ZCD-566341-1000

Model (1-4 characters)

Model	Device Code*	Model	Device Code*
R	10, 11, 12	S	1, 10, 12
R120	3, 10	SB	1, 2, 10, 12
RLN	8, 12	SN	1, 8, 12
RLS	10, 12	MMD/MME	5, 7, 10, 12
RN	8, 11, 12	MND/MNE	5, 9, 10, 12
RTN	8, 11	TED	4, 5, 10, 12
RTS	10, 11	TLD	5, 6, 10, 12
		ZCI	2, 5, 10, 12
		ZCD	5, 10, 12

*Power Switching Device Code

- | | |
|----------------------------------|---|
| 1 ASCO contactor | 8 Nonautomatic transfer switch |
| 2 Bypass-isolation switch | 9 Molded-case switches
(no overcurrent protection) |
| 3 Packaged ATS | 10 Automatic transfer switch |
| 4 Electrically held contactors | 11 250 volt max. contactor |
| 5 Programmed transition function | 12 600 volt max. contactor |
| 6 Mechanically held contactors | |
| 7 Molded-case circuit breakers | |

Logic (1 digit)

Device	Logic Code					
	1	2	3	4	5	6
R, RL, RT	SATS				MATS	
R120	solid-state					
RN	SATS					
S, SB	SATS				MATS	
SN	SATS		340			
MMD/MME, MND/MNE, TED, TLD, ZCD	SATS+	BATS+	SATS+‡	BATS+‡	MATS+	MATS+‡
ZCI	SATS+		SATS+‡		MATS+	MATS+‡

‡ With programmed transition function enabled.

Voltage Code (2 digits)

250 volt maximum		600 volt maximum		600 volt maximum	
21	110 volt, 50 Hz	60	600 volt, 60 Hz	67	190 volt, 50 Hz
22	120 volt, 60 Hz	61	110 volt, 50 Hz	68	208 volt, 60 Hz
23	220 volt, 50 Hz	62	120 volt, 60 Hz	69	440 volt, 60 Hz
24	240 volt, 60 Hz	63	220 volt, 50 Hz	70	400 volt, 50 Hz
27	190 volt, 50 Hz	64	240 volt, 60 Hz	71	380 volt, 50 Hz
28	208 volt, 60 Hz	65	550 volt, 60 Hz	72	380 volt, 60 Hz
		66	480 volt, 60 Hz	73	416 volt, 50 Hz

NOTE: GL and GT models are available only in 600-volt configurations.

Number of Poles (1 digit)

- | | |
|-------------------|---|
| 2 2 pole, 1 phase | 5 3 pole, 3 phase with overlapping
switched neutral contacts |
| 3 3 pole, 3 phase | 6 4 pole, 3 phase fully rated |
| 4 3 pole, 1 phase | |

Number of Wires (1 digit)

- | | | |
|----------|----------|----------|
| 2 2 wire | 3 3 wire | 4 4 wire |
|----------|----------|----------|

Enclosures (1 digit)

- | | |
|----------------|-------------------|
| 0 Open | 3 NEMA type 3R |
| 1 NEMA type 1 | 4 NEMA type 1 CSA |
| 2 NEMA type 12 | 5 Open CSA |

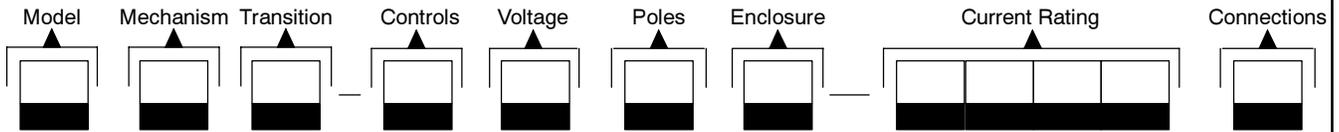
Amperes (2-4 digits)

Current rating of the switch in amperes. Valid range is 30-4000.

Figure 2 Transfer Switch Model Designation

Transfer Switch Model Designation

Record the transfer switch model designation in the boxes below. The transfer switch model designation defines characteristics and ratings as explained in the accompanying chart.



DDC/MTU Power Generation Model Designation Key

This chart explains the DDC/MTU Power Generation transfer switch model designation system. The sample model designation shown is for a Model automatic transfer switch that uses an open-transition contactor with DXPower-1000™ electrical controls rated at 220 volts, 2 poles, 3 wires, and solid neutral in a NEMA 3R enclosure with a current rating of 400 amperes. Not all possible combinations are available.

SAMPLE MODEL DESIGNATION

SCT-ADNC-0400S

Model

S: Model S automatic transfer switch

Mechanism

C: Automatic
B: Bypass isolation
N: Non-automatic

Transition

T: Open-transition
P: Programmed-transition

Electrical Controls

A: DXPower 1000™ (Digital Logic Transfer Switch Controls)

Voltage/Frequency

C: 208 volts/60 Hz	G: 380 volts/50 Hz	K: 440 volts/60 Hz
D: 220 volts/50 Hz	H: 400 volts/50 Hz	M: 480 volts/60 Hz
F: 240 volts/60 Hz	J: 416 volts/50 Hz	N: 600 volts/60 Hz

Number of Poles/Wires

N: 2 pole, 3 wire, solid neutral	W: 4 pole, 4 wire, overlapping neutral
T: 3 pole, 4 wire, solid neutral	Z: 3 pole, 4 wire, integral solid neutral
V: 4 pole, 4 wire, switched neutral	

Enclosure

A: NEMA 1*	C: NEMA 3R†	F: NEMA 4X†
B: NEMA 12†	D: NEMA 4†	G: Open unit

* Standard on 30-4000 A models and bypass models.

† Available to order on 30-800 A standard models. For other units, consult the factory.

Current Rating: Numbers indicate the current rating of the switch in amperes:

0030‡	0225	0800	2000
0070‡	0260	1000	2600
0104‡	0400	1200	3000
0150	0600	1600	4000

‡ Not applicable for bypass or programmed-transition models.

Power Connections

S: Standard
F: Front bus (available on 1600 and 2000 A models only)

Figure 3 Standard and Bypass Transfer Switch Model Designation