



**NAK ELECTRONICS PRIVATE LIMITED**  
**Plot # 543K Pace City-II Sector-37**  
**Gurugram - 122004 Haryana India.**



## DC I/P & MULTI O/P DC TO DC CONVERTER Rx (450W)

(Application: Naval)

### Features:

- Input Range 18~36VDC
- High Efficiency up to ≥80%
- Input Reverse polarity protection
- EMI/EMC - MIL-STD-461F
- Over Temperature Protection
- Short circuit Protection
- Over Current Protection
- High Power Density
- Cooling – Natural Cooled

### Technical Specifications:

#### Input:

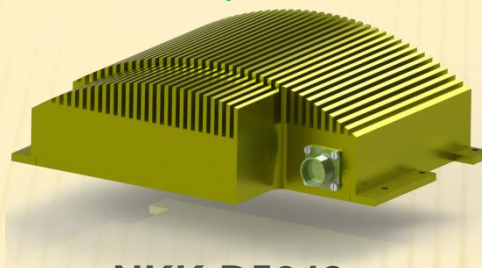
Input Nominal	: 24VDC
Range	: 18~36VDC
Current	: Nominal 23Amp. @24VDC Max. 31 @18VDC

#### Output:

	Output-1	Output-2	Output-3
Voltage	: +15VDC	-15VDC	+5VDC
Current	: 10Amp.	10Amp.	30Amp.
Power	: 150W	150W	150W

#### Regulation:

Line Regulation	: ≤1% from LL to HL
Load Regulation	: ≤1% from NL to FL
Efficiency	: ≥80% At full load on nominal I/P
Ripple	: ≤10mV pk-pk



**NKK-D5642**

### Environmental:

Operating Temp.	: -10°C to +85°C
Cooling	: Natural Cooled

### Protection:

- Input Reverse polarity protection
- Short Circuit for all Outputs
- Over Temperature

### Vibration Test:

Frequency Range(Hz) X-axis Y-axis Z-axis

- 10Hz to 30Hz 20Min. 20Min. 20Min.
- 31Hz to 60Hz 20Min. 20Min. 20Min.
- 61Hz to 100Hz 20Min. 20Min. 20Min.

### EMI/EMC Compliance to MIL STD-461F:

- CS114 : Conducted Susceptibility power leads & cables injection 10 KHz to 200MHz.
- CS115 : Conducted Susceptibility power leads & cables impulse excitation: 30Hz. for 1 Minutes
- CS116 : Conducted Susceptibility power leads & cables 10KHz to 100MHZ.
- CS118 : ±8kV 5 Pluses @ Connector end body.
- CS101 : Conducted Susceptibility power cable injection 30Hz to 150KHz.
- CE101 : Conducted Emission 30Hz to 10KHz.
- CE102 : Conducted Emission 10KHz to 10MHz.
- RE101 : Radiated Emission Magnetic 30Hz to 100KHz.
- RE102 : Radiated Emission Electric field 10KHz to 18 GHz
- RS103 : Radiated Susceptibility 2MHz to 18GHz:200V/m

### ESS:

High Temperature	: +55±2°C duration 48Hrs.
Low Temperature	: -10±2°C duration 48Hrs.

### Mechanical:

Mounting	: Chassis Mount
Depth	: 190mm
Width	: 250mm
Height	: 74 mm
Weight	: ≤4.2 Kg
Material	: Aluminum (HE30)
Protective Treatment	: Yellow Chromate Conversion