

# Fault Parameters Chart



Fault Type	Equipment Type				Top 6 KPI					
	Motor		Generator		Motor Fault	Electrical Supply Problems	Mechanical Rotating Fault	Mechanical Static Fault	Operational Fault inc Blocked Filter	Other
	specific	generic	specific	generic						
Electrical Rotor	x	x	x	x	Urgent fault					
Electrical Stator	x	x	x	x	Urgent fault					
Electrical Odd Harmonics	x		x	x		Urgent fault				
Electrical Even Harmonics	x		x	x		Urgent fault				
Motor Rotor Bars	x		x	x	Urgent fault					
Motor Unbalance/Misalignment	x		x				Non-urgent fault			
<i>Generic Unbalance / Misalignment</i>		x		x			Urgent fault			
Motor Bearing 1	x		x				Non-urgent fault			
Motor Bearing 2	x		x				Non-urgent fault			
Motor Journal 1	x		x				Non-urgent fault			
<i>Generic Bearing</i>		x		x			Urgent fault			
Motor Foundation / Looseness	x						Non-urgent fault			
<i>Generic Foundation / Looseness</i>		x		x			Urgent fault			
Motor Transmission Looseness	x						Non-urgent fault			
<i>Generic Transmission Looseness</i>		x		x			Urgent fault			
Motor Resonance	x		x							Urgent fault
Trans 1 Belt Drive	x		x				Non-urgent fault			
Trans 1 Gearbox	x		x				Non-urgent fault			
Driven 1 Unbalance / Misalignment	x		x				Non-urgent fault			
Driven 1 Bearing 1	x		x				Non-urgent fault			
Driven 1 Bearing 2	x		x				Non-urgent fault			
Driven 1 Journal 1	x		x				Non-urgent fault			
Driven 1 Foundation Looseness	x		x				Non-urgent fault			
Driven 1 Transmission Looseness	x		x				Non-urgent fault			
Driven 1 Resonance	x		x				Non-urgent fault			
Driven 1 Impeller 1	x		x				Non-urgent fault			
Trans 2 Belt Drive	x		x				Non-urgent fault			
Trans 2 Gearbox	x		x				Non-urgent fault			
Driven 2 Unbalance / Misalignment	x		x				Non-urgent fault			
Driven 2 Bearing 1	x		x				Non-urgent fault			
Driven 2 Bearing 2	x		x				Non-urgent fault			
Driven 2 Journal 1	x		x				Non-urgent fault			
Driven 2 Foundation Looseness	x		x				Non-urgent fault			
Driven 2 Transmission Looseness	x		x				Non-urgent fault			
Driven 2 Resonance	x		x				Non-urgent fault			
Driven 2 Impeller 1	x		x				Non-urgent fault			
Power Factor	x	x	x	x		Urgent fault			Urgent fault	
Voltage Balance	x	x	x	x		Urgent fault			Urgent fault	
Current Balance	x		x	x		Urgent fault				
Voltage THD	x		x	x		Urgent fault				
Current THD	x		x	x		Urgent fault				
<i>Active Power: Nominal Power</i>									Urgent fault	
Any other spectral fault with Peak exceeding zone of parameters										Urgent fault

## FAULT TYPES

**Specific:** Can be identified when the appropriate information has been entered into the system – typically, rotating element bearing type code numbers, number of vanes on a pump or fan impeller, and the numbers of teeth on each gear in a gearbox, or the pulley diameters and separation distance for belt drives.

**Generic:** Detected when there is no special information entered about the equipment apart from its normal voltage, nominal current, and nominal rotational speed.