How to trouble Shoot a Nuisance tripping on GV and LRD ?

I- Type of publication

- [ ] Typical application
- [ ] Best know Method (BKM)
- [x] Troubleshooting guide
- [ ] Level 2 use
- [ ] Internal use
- [x] Customer

II- Product

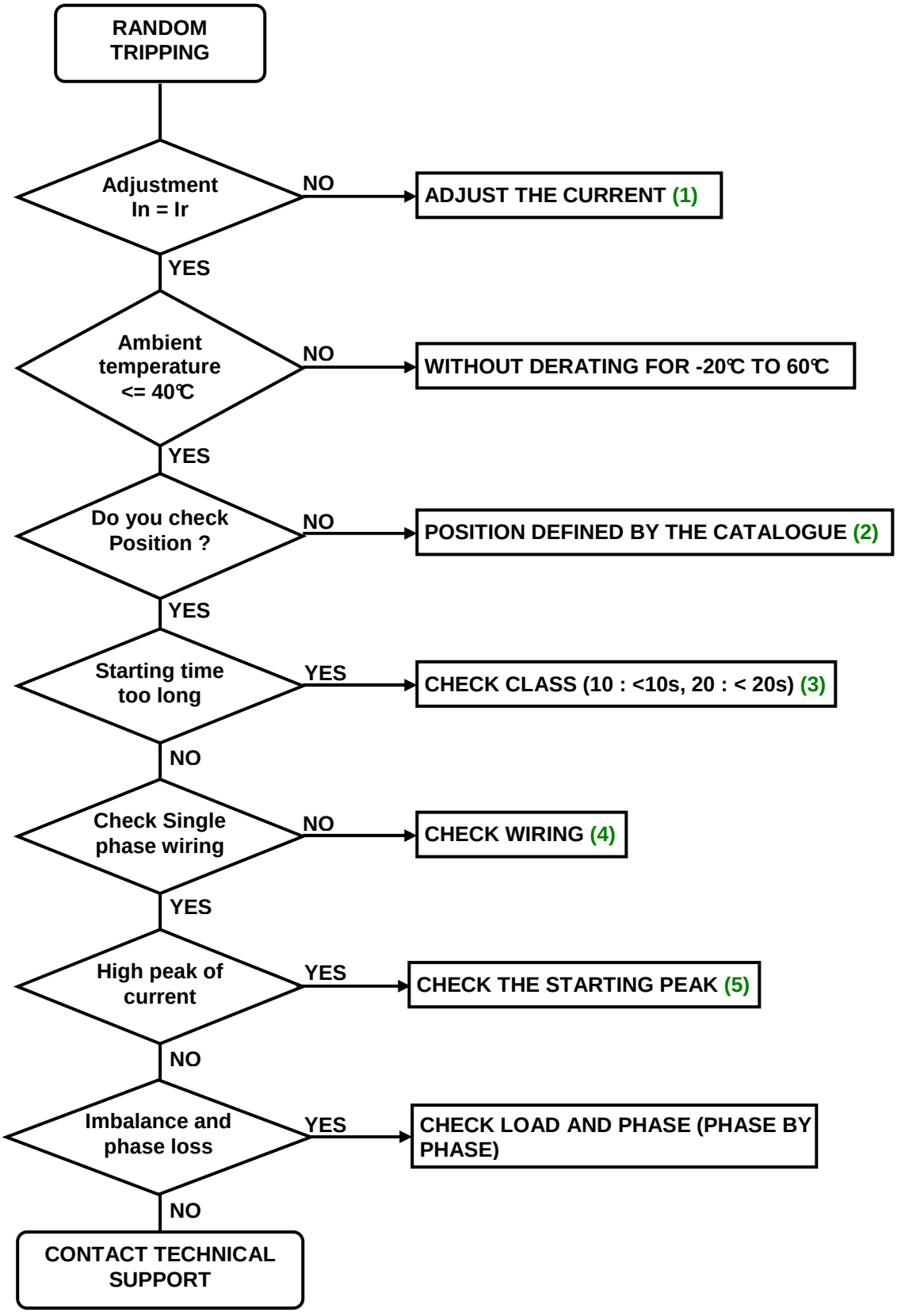
- Product range : Protection

- Product family : GV/LRD

III- Introduction

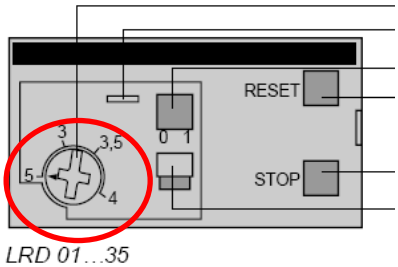
Use this troubleshooting guide if you experience nuisance tripping on TeSys GV and TeSys LRD.

IV- Description

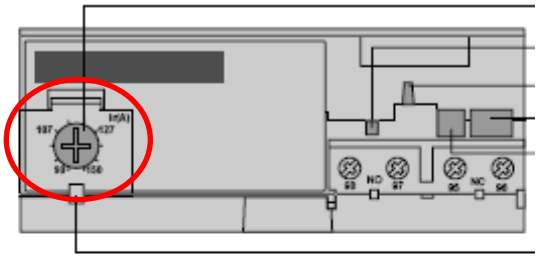


(1) Rotary knob for current setting

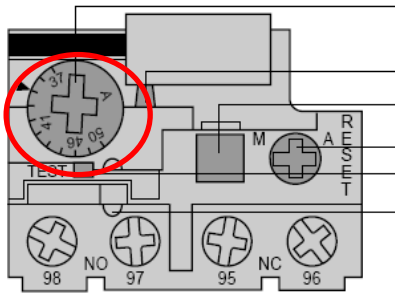
The mark should be placed at the nominal current level (circled in red)



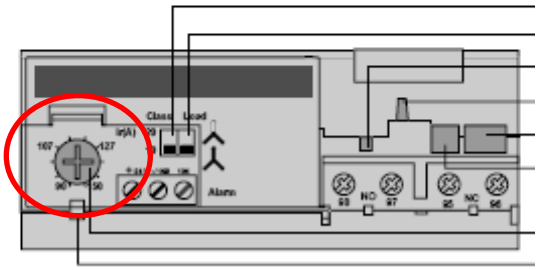
LRD 01…35



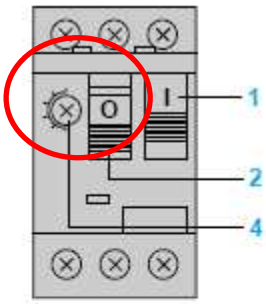
LR9 D5367…D5569



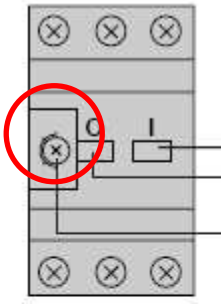
LRD 3322…4369, LR2 D



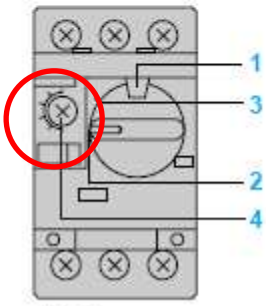
LR9 D67 et D69



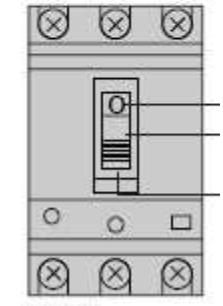
GV2 ME



GV3 ME



GV2 P

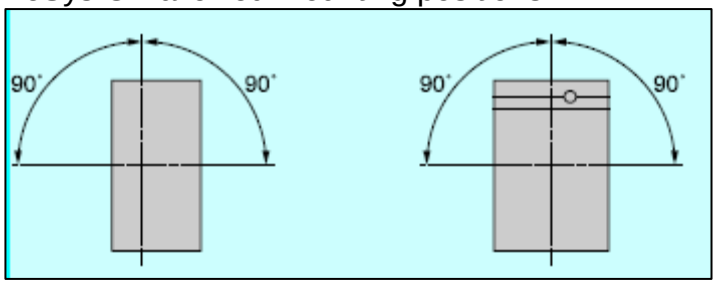


GV7 R

(2) Allowed mounting positions

TeSys LR* => all positions are allowed

TeSys GV allowed mounting positions



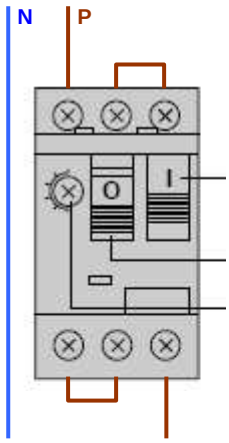
Side view *Front view*

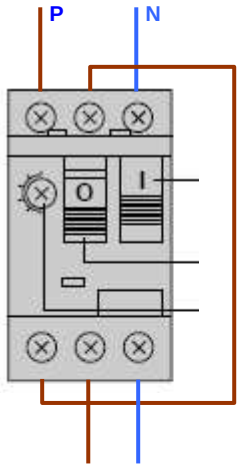
(3) Protection class of relays

	1.05Ir	**1.20Ir**	**1.5Ir**	**7.2Ir**
Class	Tripping time from cold state			
10A	>2h	<2h	< 2 mn	2s < tp < 10s
10	>2h	<2h	> 4 mn	4s < tp < 10s
20	>2h	<2h	> 8 mn	6s < tp < 20s
30	>2h	<2h	> 12 mn	9s < tp < 30s

(4)Single phase wiring

The single phase should be wired trough all 3 poles of the GV or LRD protection device, so that the phase imbalance/phase loss protection is not activated.
If neutral is used, it can be wired one pole (then the single phase is connected on 2 poles), or not connected (and single phase connected through 3 poles)





(5) Current peak intensity on starting

Use appropriate amp clamp and oscilloscope to measure the current peak during starting.
For asynchronous motors, this peak should not exceed 8 times the nominal current.