



DIRECT FLOW DOMESTIC HOT WATER SUPPLY SYSTEMS

What systems?

- GLE Solar ICS collectors with special system design;
- Hot water inside the collector directly flows into the storage tank with pipe pressure;
- No heat exchange; no pump, no controller to operate; very cost effective.

Where to use?

- Good solar condition;
- Light freezing climate zone;
- Some shading condition around.

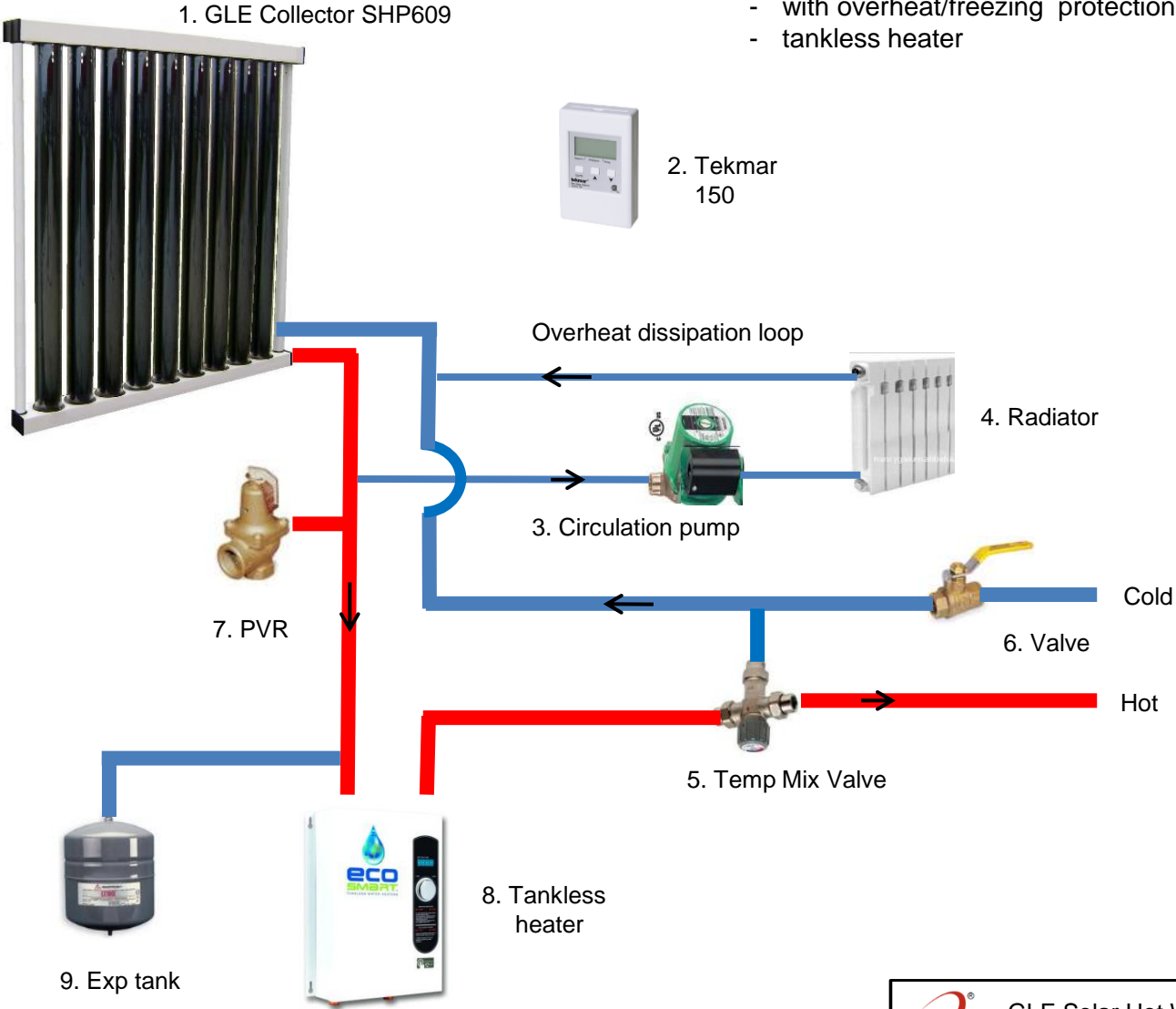
Which features?

- Simplest system, no tank, no pump to work, no heat exchange, very cost effective;
- Maximize the solar BTU production; overheat/freezing protection;
- SRCC OG-100, OG-300 and FSEC of collectors and systems certificated.

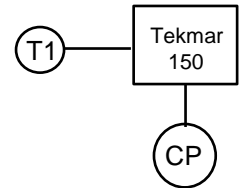
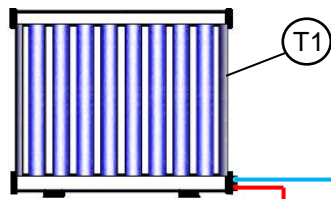


GLE Direct Flow Hot Water Supply System

- with overheat/freezing protection
- tankless heater

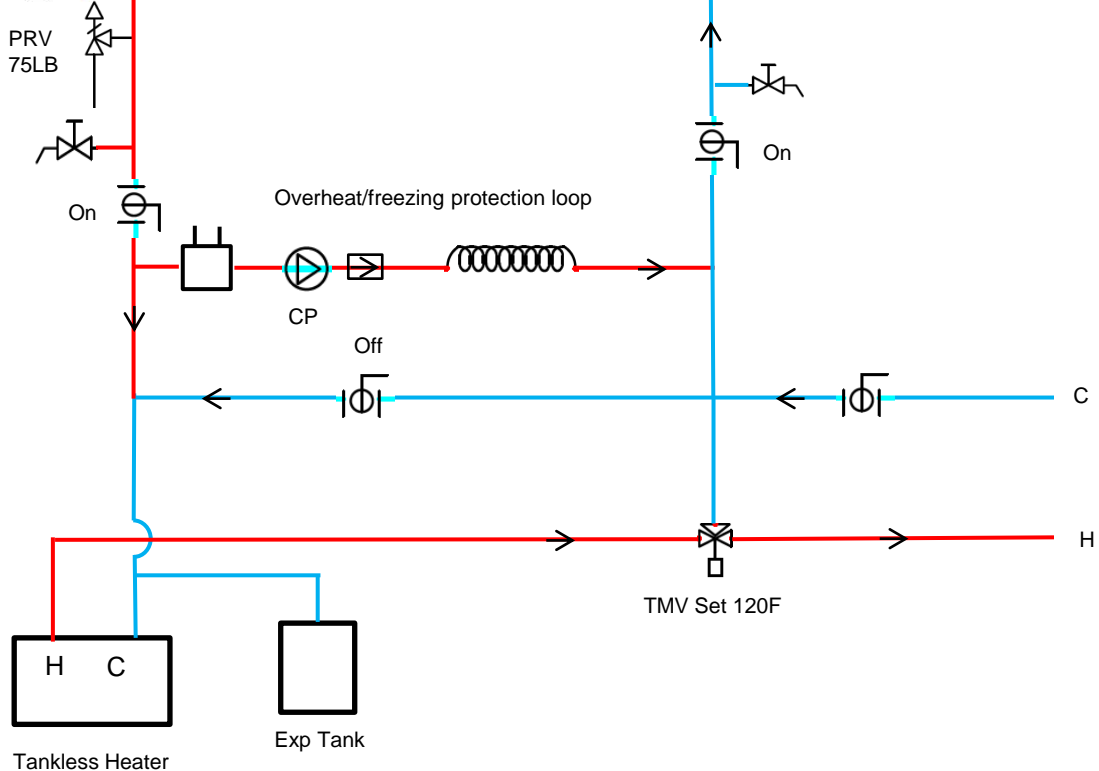


GLE SOLAR PANEL- END UNIT

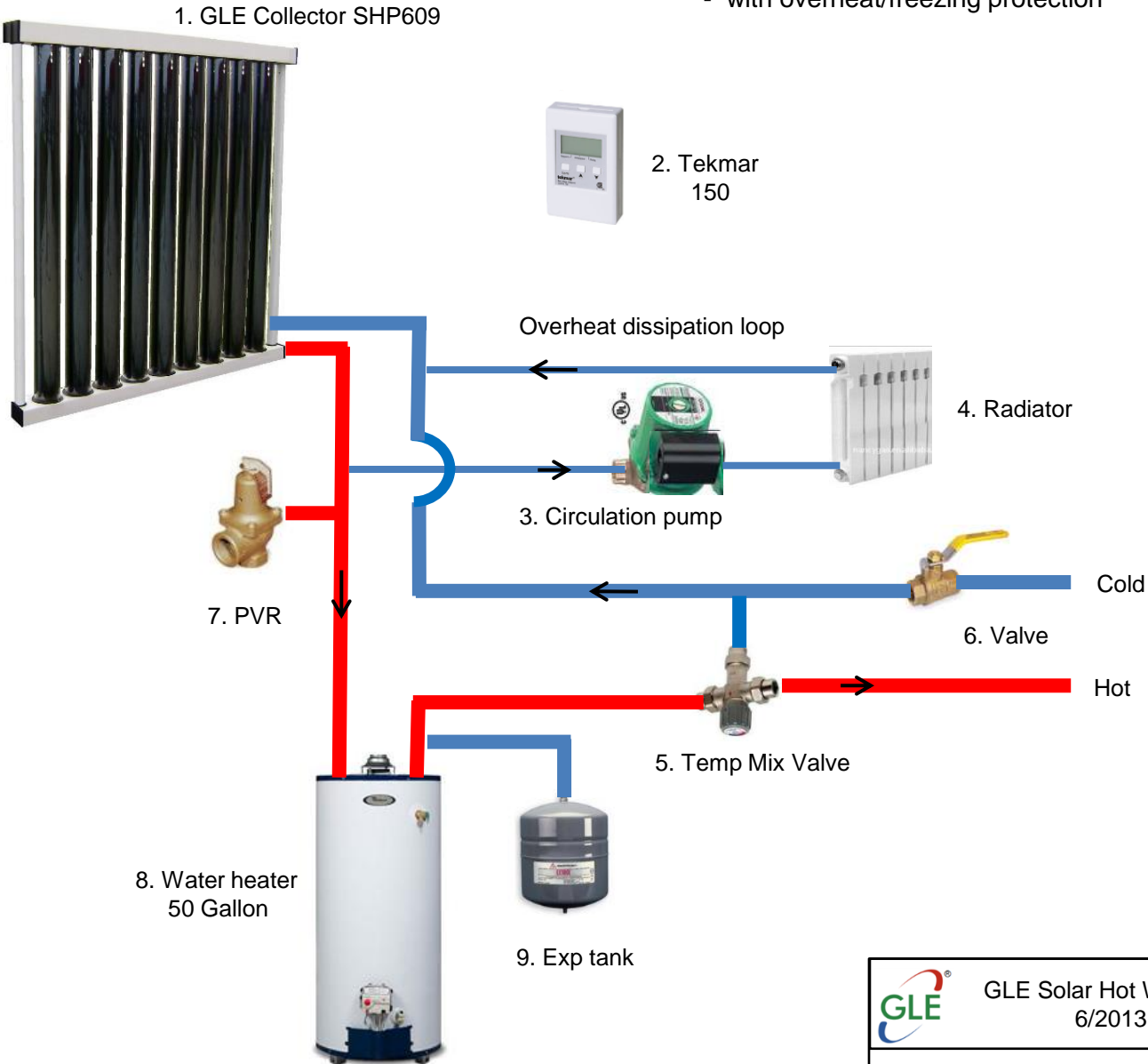


Notes:

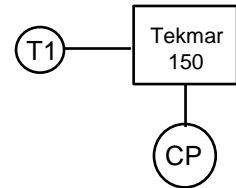
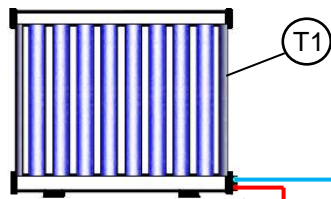
- 1) All outdoor pipe lines should be insulated if in freezing zone;
- 2) Overheat dissipation device can be bare pipe buried underground or mechanical radiator in basement or above ground.
- 3) The temperature of Tekmar controller for overheat protection could be set as 180 degree or above.
- 4) Heat tape lines in freezing climate.



GLE Direct Flow Hot Water Supply System
- with overheat/freezing protection

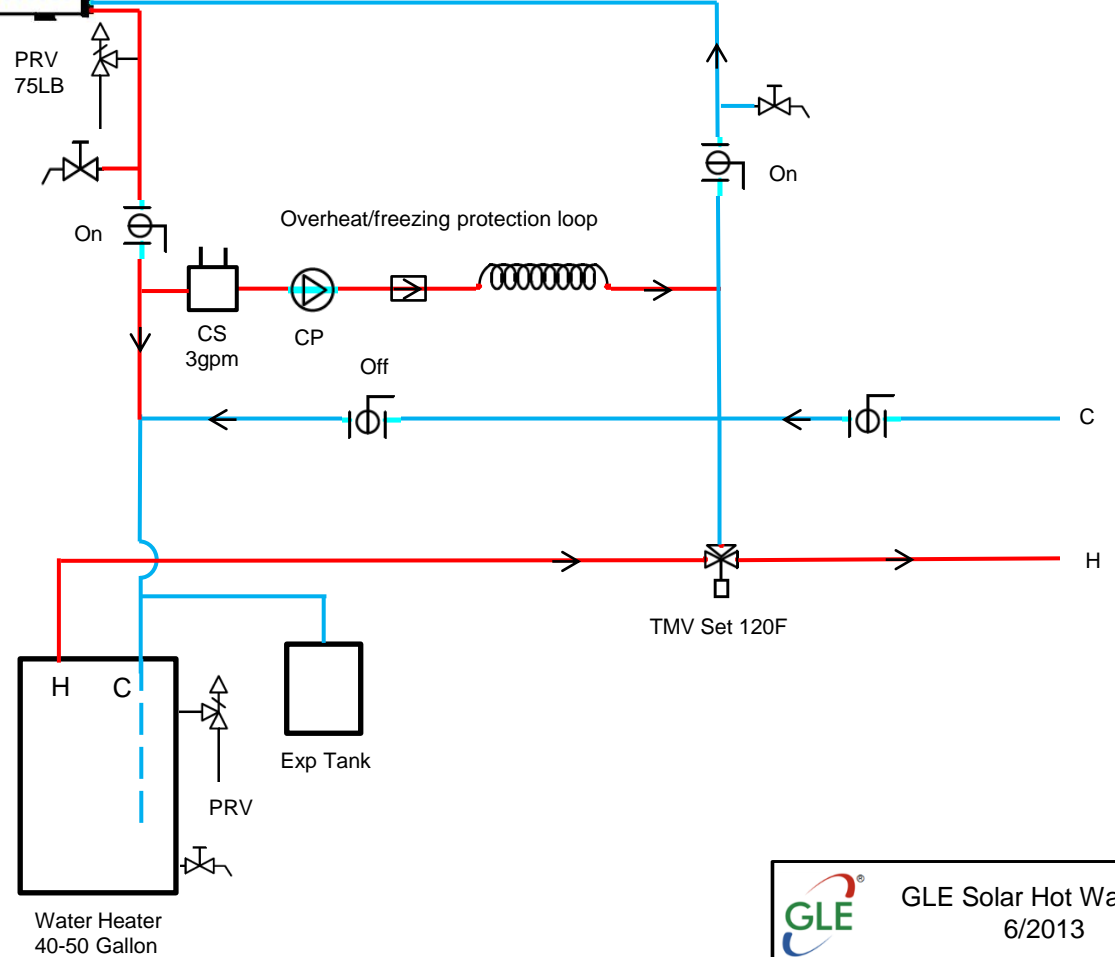


GLE SOLAR PANEL- END UNIT



Notes:

- 1) All outside door pipe lines should be insulated if in freezing zone;
- 2) Overheat dissipation device can be bare pipe buried underground or mechanical radiator in basement or above ground.
- 3) The temperature of Tekmar controller for overheat protection could be set as 180 degree or above.
- 4) Heat tape lines in freezing climate.



Key Devices and Components List

| Order | Name | Description | Sizes | Notes |
|-------|-----------------------|--|----------------------|----------------------|
| 1 | Solar collectors | GLE Solar ICS collectors | 4 foot; 6 foot panel | |
| 2 | Controller | Tekmar 152; 150; 155 | | |
| 3 | Circulation pump 1 | Wilo Star 8 BS7 | | Main circulation |
| 4 | Circulation pump 2 | Wilo | | Protection loop pump |
| 5 | Dissipation Device | Pex pipe loop or mechanical radiator | | |
| 6 | PRV | Pressure relief valve | 75 LB | |
| 7 | Storage tank | Regular electric water heater as storage tank, Whirlpool | 40 – 50 G | |
| 8 | Water heater | Electric or gas based heater or tankless heater ECO | 40 – 50 G | |
| 9 | Expansion tank | Amtrol ST-8 | 3.2 Gallon | |
| 10 | Temperature mix valve | Honeywell RAM | 120 set temperature | |
| 11 | Ball valves | | | |
| 12 | | | | |