```
assoced_equiv_rel  THM

⊢  EquivRel x,y:ℤ. x ∼ y
| by Assert (EquivRel x,y:ℤ. Symmetrize(u,v.u | v;x;y))
|
|\
| .....assertion .....
| ⊢  EquivRel x,y:ℤ. Symmetrize(u,v.u | v;x;y)
|   by Backchain
|      [Thm* ∀R:(T→T→Prop).
|            Preorder(T;x,y.R(x,y))
|            ⇒
|            (EquivRel a,b:T. Symmetrize(x,y.R(x,y);a;b))
|       {symmetrized_preorder}
|      ;Thm* Preorder(ℤ;x,y.x | y)    {divides_preorder}]
|
.\
. 1. EquivRel x,y:ℤ. Symmetrize(u,v.u | v;x;y)
. ⊢  EquivRel x,y:ℤ. x ∼ y
.   by Unfold ‘symmetrize‘ 1 THEN Unfold ‘assoced‘ 0 THEN Trivial
END
```